

# THE MONTHLY CHRONICLE.

---

JUNE, 1840.

---

## ARTICLE VII.

### THE STATE AND PROSPECTS OF TRADE AND INDUSTRY—THIRD ARTICLE.

WE alluded in our last number to the unfortunate abandonment, by the conductors of many of the banks of the Middle and Southern States, of a system of curtailment, as the necessary preparation for an early resumption of specie payments, from the hopes which were entertained of accomplishing the object, by encouraging a system of active trade. It is necessary for a proper understanding of this subject, and particularly of the causes of the second suspension of specie payments, in Philadelphia, and the more southern markets, to examine this course of policy more particularly.

The most distinct developement of the new system of policy here alluded to, is to be found in the celebrated letter of Mr. Biddle, then President of the Bank of the United States, to Mr. J. Q. Adams, dated April 5, 1838. This letter was written after the proposal of a bank convention at New York, to consider the expediency of naming a day for a general resumption of specie payments, and it explains the reasons of the writer for opposing that measure, and for recommending a postponement of the attempts to resume, until it could be aided by the co-operation of the Government of the United States. This letter, coming from such a source, from which nothing but the soundest doctrines on questions of this sort were expected, excited great surprise and regret at the time; and the evils which were apprehended, from the adoption of the system recommended, have been since fully realized, from its partial adoption.

He began his letter by declaring that his efforts had been uniformly directed to securing the benefits of a sound currency, and to banishing from circulation every thing but the precious metals, and notes always convertible into them—that he thought no other currency safe or tolerable—and that the country ought to return to it, the first moment it could be done permanently. For the attainment of this object, the institution to which he belonged had made great efforts.

It had bought, and added to the supply in its vaults, nearly \$3,000,000 in gold and silver, its notes in circulation were but six millions, its specie, after paying half a million to the United States, amounted to four millions, and it had eight or ten millions of funds in Europe. This statement shows, that the original policy of this bank had been, what has been ascribed in the foregoing remarks to the banks generally throughout the country, that of preparing for an early resumption. But it was now announced for the first time, that this policy was no longer sustained in this quarter, and the letter goes on to develop and defend an entirely different system. Instead of any longer justifying the suspension as *a measure of necessity*, Mr. Biddle proceeds to argue the propriety of continuing it as *a measure of policy*. To show that he no longer relies on the ground of necessity, to justify the continuance of suspension, he avows distinctly, "our principles therefore induce us to an early resumption; *our preparations would justify it.*"

The grounds of the new system of policy as explained by Mr. Biddle in his letter were, that the Bank of the United States made common cause with the other banks—that the character and prosperity of the country were identified with its banking system—that the suspension was wholly conventional, between the banks and the community, arising from their mutual conviction that it was for their mutual benefit—that the banks were but the mere agents of the community—and that the inquiry whether they were ready to resume, was only another form of asking whether the people were ready to pay their debts to the banks! This bold announcement of a new code of morals in relation to the promises of banks, was heard with astonishment. Connected as it was with the declaration that no other currency than the precious metals, or notes always convertible into them, is safe or tolerable, and with the admission that the preparations of the bank would justify an early resumption, it was quite incomprehensible. The question to be determined was, as to the expediency, and the obligation of the banks to resume specie payments. The suspension had been hitherto excused on the plea of necessity alone. This plea was now admitted to be no longer available. It was acknowledged that the necessity no longer existed, or that it would soon cease; and as this reason failed, the point of inquiry, assumed as the preliminary to the resumption of specie payments, was for the first time, adroitly changed to the question, whether the people were ready to pay their debts to the banks. On what principle can the question of the readiness of the people to pay their debts to the banks, as a conventional arrangement between the banks and their debtors, for their mutual convenience, relieve the banks from their obligation to meet their engagements? It was the convention already entered into between the banks and those who held their notes and

promises, which was to be considered; and it is difficult to perceive how this was to be set aside, by a convention with another class of the community, although such a convention might be for the benefit of the latter. The letter goes on to argue the inexpediency of resumption, on the ground first that the causes of the suspension had not ceased to exist. These causes were stated to be, the specie circular—the mismanagement of the deposits by the Secretary of the Treasury—and the clamor raised by the executive against bank notes, which alarmed the people for their safety, and caused a run upon the banks for specie, and it was maintained that these causes had not ceased to exist, but were still in force, with increased effect. If the views which have been taken in the foregoing pages be correct, the causes here enumerated had not the sole, or even the chief agency in producing the suspension; and if they had been the only causes, so long as the *necessity* of continuing the suspension was admitted to have ceased, the substantial reason, and the only justification for the suspension had also ceased. It was argued further, that the executive government of the United States were hostile to the whole credit system, and bent on introducing an exclusively metallic system, and that if the former fail in the struggle, the fall must be final, and it was therefore imperative on those who had the charge of the banks to preserve them in their present position of safety—if they should be compelled again to suspend, it would be regarded as a new triumph. A more worthy method of meeting the hostile attack would have been, to show that the institutions could be sustained in their purity, instead of abandoning the field, by a confession of weakness. A trial between a metallic currency, and an exclusively paper currency was not the issue to be tested. To put the controversy on that ground, was to give the enemy all the advantage in the conflict. What ground was there to expect, that the reflecting portion of the community would rally for the support of the banks, so long as they avowed a purpose of refusing for an indefinite period to pay their engagements in specie? It was further argued that a general resumption could not be safely undertaken without the co-operation of Congress. To rest upon this argument was evidently to postpone the resumption to a very remote period, as it was well known, from the manner in which the government was constituted, that no aid from that quarter could be expected for several years.

It was admitted by the letter, that there was one circumstance in the state of affairs, favorable to a general resumption, and that was the low rate of exchange with England. This was in fact the only circumstance, next to the actual solvency of the banks, deserving of serious consideration, in determining the ability of the banks to resume specie payments with safety. If exchange were high, so as to invite the export of specie for the payment of foreign debts, it might have

been unsafe for the banks to resume their payments in specie, but as exchange was so low that it was apparent there would be no demand for specie for exportation, nothing could be clearer than that the opportunity was favorable for returning to the only criterion for regulating the amount of the paper currency, by making it again convertible into gold and silver.

But said Mr. Biddle, "it is not exchange alone that has fallen.—Exchange on England has not fallen as much as the internal exchanges, or stocks, or real estate, or house rent, have fallen. This fact seems decisive of the cause. But can this depression continue? Certainly not. These rigorous measures are understood to be only preliminary—only preparations for an expansion by the banks of New York, which is to restore ease and confidence. Well, the moment this ease and confidence return, all things will rise, and exchanges of course among the number." This is an entire begging of the question. It is at first admitted, that the state of the foreign exchanges, the state of internal exchanges, the state of prices generally, is precisely favorable for the safe and easy resumption of specie payments by the banks. But it is gratuitously assumed that the proposed resumption is only a preparation for an expansion. Indeed! and how does this appear? It was, on the contrary, the very measure to prevent an expansion, and the only effectual measure by which it could be guarded against, and the only method by which a general curtailment, and anything like a uniform standard of value throughout the country could be obtained. Until these objects could be effected there was no hope of preventing the anticipated expansion, and restoring a healthy state of trade in the country.

But Mr. Biddle's system was to effect these objects by an extremely slow and gentle process. It was like the homœopathic system of medicine, by which the doses given are so extremely small, that they can have no conceivable effect but upon the imagination. We will let him explain his method of operations, in his own words.

"In all the large movements of human affairs," says he, "as in the operations of nature, the great law is gentleness—violence is the last resource of weakness. The disease of the country was an overstrained and distempered energy. The remedy was repose. The question of the currency, though important, was only secondary. The first concern was to pay our debts, and especially not to depreciate the value of our means of paying them. Accordingly, it seemed to me that after the suspension, the true course of this country was to begin a gentle and gradual diminution of loans, sufficient to prevent the hazards of expansion while the restraint of specie payments was removed, and to prepare for the resumption, but with no rash competition as to the amount which the several banks could curtail—to make no violent changes in the standard of value, and to give time for a settlement with foreigners, and among ourselves, on the same or nearly the same basis upon



which these mutual engagements were contracted—letting the crops go to their destined markets without depreciating their price. After this, the resumption, with the aid of Congress, would have been easy and spontaneous. It was in this spirit that the Bank of the U. States has not diminished ten per cent. of its loans, while it added about three millions to its specie—and will have given the necessary facilities for shipping the crops of the South and West to the amount probably of fifteen or twenty millions of dollars, placing its own confidential agent in England to protect the great commercial and pecuniary interests of the country. This seemed to be its proper function. It was thus that it hoped to discharge its duty to the whole Union. It was thus, too, it could show its fidelity to Pennsylvania, by aiding its public improvements—by keeping its business and its people in comparative ease, and by not suffering the prosperity of its commercial capital to be prostrated—objects, these, far more important than whether specie payments be resumed a few months sooner or later.”

Here is the germ of much of the mischief which has weighed upon the affairs of this country for the last twelve months. It was the promulgation of a scheme by which the necessity of a return to a system of measuring the value of property, by a currency resting on a specie basis, might be avoided; and by which persons in debt might be enabled to make payments by contracting new debts, and a sensible depreciation of property might be prevented. The recommendation was, it is true, that there should be a general and gradual diminution of loans. It may be imagined what would have been the actual diminution, had the country acquiesced in the proposal to persevere in the system of paying no specie by the banks, until the aid of congress should be secured; when it is perceived, that even after the adoption, contrary to the advice of Mr. Biddle, of the resolution to resume specie payments, loans were so widely extended, as to produce another flood of extravagant importations, before the expiration of that year. It may be safely assumed, that had all the banks been released from the obligation of paying in specie, by a general acquiescence in the proposal to postpone the period of resumption, in conformity with the recommendation of Mr. Biddle, the excess of loans would have been vastly greater than they were under the course which was actually pursued. Yet such was the effect of the credits afforded by the Bank of the United States, and other institutions, by advances on cotton, and by loans in other forms, and by the negotiation of State Stocks in Europe, that a premature and sickly activity of trade was produced, which led at once to a repetition of the recent excesses of importation. This was of but short duration, and it ended in a renewed resort to a suspension of specie payments, by all the banks in those parts of the country where this system of policy found favor. Such are the causes of the second suspension, and of the long postponement of the only practicable

cure to the embarrassments of the country. The operation of these causes might be further illustrated, by a more particular reference to the mercantile operations of 1838 and '39. But the lamentable effects of the policy which we have thus briefly described, are perhaps too generally acknowledged to render any further explanation necessary.

It remains to be considered, what are the safe remedies for these long existing evils. To answer this question satisfactorily, it is necessary to comprehend distinctly what it is, that is now wanting, to the restoration of that prosperous state of commerce and industry, which has been enjoyed in this country for a long course of years, up to the period of the late explosion. These desiderata are confidence, and a uniform and sound currency. The first is the most important and indispensable, the second when attained will be highly instrumental in restoring the other. Until there shall be a general return to specie payments, there can be no general restoration of commercial credit. But when this object is accomplished, we may expect a gradual re-establishment of credit and a general revival of trade. Nothing else is wanting to the successful prosecution of all the branches of industry. Capital would in that case no longer be wanting for productive enterprises. The capital of the country, with credit, is abundant. Without credit this capital is comparatively unproductive, because much of it is in the hands of those who cannot employ it to advantage. Labor is every where in abundance for adding daily to the wealth of the country, whenever by a combination of capital and credit it can be advantageously employed. At present much of this labor is unemployed, partly for the want of those who possess the pecuniary means of setting it in motion, and partly for the want of confidence that there will be ability in the community to pay for the articles produced. There is a still further apprehension that the products of industry if sold, will be paid for in a depreciated and uncertain currency. Every thing points to the general want of confidence among men of business, of their ability to fulfil their engagements with one another, and of the general ability of the country to pay for the articles which shall be produced, as the great cause of stagnation in business. This distrust must exist, so long as debts of all sorts may be paid in paper, which paper is not convertible into specie.

The great object to be attained, therefore, is a general resumption of specie payments by the banks throughout the country. This object is doubtless fully within the power of all solvent banks. Money is in sufficient abundance in the country, and the rate of foreign exchange is favorable. There is no room to apprehend any pressing foreign demand for money, which can suddenly disturb the ratio of exchange, in a degree beyond the ability of the banks to

meet or control. They will be as able to do this in future as they have ever been heretofore. If there are unfavorable balances against particular cities, or banks, beyond the ability of the banks to meet them immediately, these may undoubtedly be provided for, by mutual agreement between the debtor and creditor parties, for such term of credit as may be necessary, on reasonable terms. A short time only would be requisite, to make the necessary arrangements. If there are exceptions to this condition of things, on the part of certain States, where the banks are neither able to pay their obligations, nor to give satisfactory assurances of payment at a future day, it is idle for those banks which are now able to pay, to wait for these to become so. The condition of the latter is not likely, in most cases, to be improved by longer delay.

The effectual and permanent restoration of the currency, it has been seen, was regarded by the late president of the Bank of the United States, as impracticable, without the aid of the federal government. We adopt fully the opinion, that the aid of the national government would be most salutary, in restoring the currency to that desirable condition in which it was maintained, during nearly the whole existence of the late National Bank; and such aid is perhaps indispensable to the full action and entire security of any system, suited to supply in any adequate degree the place of that which was so deplorably lost. But it is necessary to work with such materials as can be procured. We must consider, not what is desirable, but what is practicable. So long as the national government has repudiated the power of regulating the currency, and so long as we have, and can have for the present, no currency except that which depends upon State authority, and State regulation, overruled and controlled as that regulation is by public opinion, it is manifest that the only practicable mode of reforming and sustaining the currency is to give a right direction to the administration of the State banks, through the agency and dictation of the public opinion. In opposition to this dictatorship, it has been seen that State legislation is powerless. In opposition to it, even national legislation must be powerless.

Under a full sense of the ruinous consequences of tolerating a paper currency—in face of the proof afforded by the recent experience of the New England States, and New York, of the practicability of returning to a specie currency,—there is reason to believe that with the aid of enlightened men, who cannot but perceive the importance of such a reform, most of the States might in a short time be induced to return to a system of specie payments, and to renounce forever the policy of tolerating the bankruptcy of the legalized monied institutions of the country, on the plea that it prevents the bankruptcy of individuals. At a moment when this plea was well founded, and when for a short period under the very extraordinary, unforeseen

and sudden pressure which weighed upon them, an act of temporary bankruptcy was inevitable, the suspension of specie payments was every where tolerated and excused by the public sentiment. It is only requisite to satisfy the public, that the continuance of the suspension is no longer necessary; and that the plea of continuing it for the accommodation of the debtors of banks, is entirely indefensible, because in consulting the interests of the comparatively few, it sacrifices the interests of the many. To impress these obvious truths on the public mind, will be to enlist the whole force of the public sentiment in aid of the laws of the States. These laws in general, now grant the most ample authority for enforcing specie payments. Let the conviction be but universally felt throughout the union, that a renewal and scrupulous maintenance of specie payments, by all banks whose notes are suffered to circulate as currency, is indispensable to the restoration of confidence and to the revival of trade, and it will be found to lend a wonderful security to the solvency of these institutions. It will give a vigor and efficiency to laws which have been for the last three years entirely inoperative.

It is therefore a most unwise policy, to fold our hands in the idle belief that a sound currency, and with it mercantile confidence, are to be restored by an act of the national legislature, and under the despondent impression that without such legislation the object is unattainable. A correct public sentiment is by far the most important object of the two; and without a reform of the public sentiment, to a certain extent, it is obvious that such legislation is not to be hoped for, and that if it were attained it would be in the utmost hazard of proving inoperative. If a suspension of specie payments is to be recognized by the public, as a legitimate method of relief against the pressure of debts, and so far countenanced in the public opinion, that State laws for enforcing payment cannot be carried into execution against banks, what is to be the security for the execution of such laws, under like circumstances, against a National Bank? The security after all is neither in the letter of the law, nor in the authority by which it is enacted, but in the public sentiment which gives it a sanction, and ensures its being enforced. The security for the maintenance of this public sentiment must be the universal conviction, resting in the most irrefragable truth, that a sound currency, founded on the basis of convertibility with specie, is indispensable to the maintenance of commercial confidence, and to the general activity and success of business.

In indicating this as the only practicable remedy for the present embarrassments, we point at the only security against the recurrence in future of like disasters, to those under which we are now suffering. The intelligent portion of the public, by due reflection on the causes and consequences of the late suspension of specie payments, will



come to the settled conviction, that such an event is the greatest calamity that can befall the nation. They will satisfy themselves that disastrous as has been this event, and difficult to recover from, a repetition of it would probably be even more disastrous, and its consequences of longer duration; from the natural effect of repeated instances of breach of faith, in impairing confidence. They will therefore impress it upon their own minds, and upon the public, with the force of a fixed religious principle, that such another suspension is to be guarded against at every sacrifice. In such a popular conviction there may be security. In nothing short of it can there be any. Without it a national bank, and national laws for the regulation of the currency would be unavailing. With it, national legislation will be in a great measure unnecessary—unnecessary we mean for the great and substantial objects of a sound currency, though it may be instrumental in giving additional confidence, where the utmost faith is desirable, and in extending facilities, which might give to a merely sound currency, a higher degree of perfection.

---

## ARTICLE VIII.

### THE CENSUS OF 1840.

AN Act was passed at the last session of Congress providing for the taking of the next decennial census of the United States. The enumeration of inhabitants is to be made on the 1st of the present month of June 1840, or to report the number existing on that day. The law so far as it regards the classification of the population according to age, corresponds with that under which the census of 1830 was taken. The census of the white population is required to embrace separate returns of the number under 5 years of age, and within each period of five years to twenty—within each period of ten years to 100, and the number over 100 years—making eleven classes for each sex. The free colored persons and slaves, are to be returned separately in six classes, designating the numbers under 10 years of age, the number between 10 and 24, 24 and 36, 36 and 55, 55 and 100, and over 100. Why these particular limits of the several classes were adopted, or why a different classification for blacks was adopted, from that required of the whites, we are not able to explain. We conceive it to be a defect in the law, to attempt to make so many classes, as the classification will not be made in the reports, with any degree of accuracy, and the difficulty of obtaining an approximation to accuracy is increased by multiplying the distinctions to be noted. A distinct classification of those over and under 5 years, and over and

under 15 years, respectively, appears to be without any good reason. It is difficult to imagine any advantage in it, to compensate for the additional trouble which it must cost.

The present law, like the last, requires a return of deaf and dumb and blind persons, in addition to the number employed in Agriculture, in Mining, and in Commerce, Manufactures, Navigation and the learned professions, the number of insane and idiots, distinguishing those supported at public charge, and those at private charge, and the number of pensioners. A return is also required of the number of persons over 20 years old who cannot read and write—also of the number of persons, “at each University, College, Academy, School and Common School,” on the 1st of June 1840, distinguishing the number of scholars instructed at public charge.

Returns are also required by the present act to be made, of the amount of produce of the various branches of industry during the year 1839. These are to be classified under forty distinct heads, together with the number of establishments, or manufactories, the number of persons employed, and the amount of capital invested. Under the head of mines, the quantity of iron produced is to be returned, the number of bloomeries, forges and rolling mills, the quantity of iron cast, and the number of furnaces, the tons of fuel consumed—the quantity of lead and gold produced, and the number of smelting houses employed in the production of each—the quantity of other metals—the tons of anthracite and bituminous coal raised—the bushels of salt made—the value of granite, marble, and other kinds of stone quarried, with the number of men employed, and capital invested in each of these branches of industry.

Under the head of Agriculture, the number of horses, mules, cattle, sheep and swine, is to be returned—the estimated value of poultry—the bushels of wheat raised in 1839, also of corn, oats, rye, buckwheat, potatoes—the tons of hay, hemp and flax, pounds of wool, hops, wax, tobacco, rice, cotton, silk cocoons, and sugar, the gallons of wine, the cords of wood sold, the value of products of the dairy, of the orchard, and of home made or family manufactures. A similar return is required of the products of horticulture. Under the head of Commerce, the number of houses employed in foreign trade, in 1839, is to be returned—the number of commission houses—of retail dry goods—the capital invested in each—the number of lumber yards—the number of men employed—the number employed in internal transportation—the number of butchers, packers, &c. Under the head of Fisheries, the quantity of fish, and of the various kinds cured in 1839, is required to be returned—the quantity of sperm-aceti, whale and other fish oil—the value of whalebone—the number of men employed, and amount of capital invested. The products of the Forest, are to be returned under the heads of value of lumber

obtained in 1839—the barrels of tar, pitch, turpentine and rosin, the tons of pot and pearl ashes—the value of skins and furs, and the value of ginseng and other productions not enumerated.

Under the head of Manufactures, besides the number of persons, and in most cases the capital employed in each branch, in the year 1839, distinct returns are required of the value of the hardware, cutlery and nails manufactured—the number of cannon and small arms—the value of manufactures of gold, silver, jewels, brass, copper, zinc and tin,—the value of bricks and lime—the number of fulling mills, and of woollen manufactories, and value of woollen goods—the number of cotton manufactories, and of spindles, and of printing and dyeing establishments, the pounds and value of reeled, thrown, or other silk—the value of flax manufactured, of hats, caps and bonnets—the manufacture of shoes, boots, and saddlery, and value of articles manufactured, the number of sides of sole, and upper leather, the value of tobacco manufactured—the pounds of soap and of tallow, sperm and wax candles—the number of distilleries, breweries and powder mills, with the quantity of spirits, beer and powder made,—the value of drugs and medicines, of glass and earthen ware—of refined sugar, chocolate and confectionary, the number of paper mills and value of paper made, the number of printing offices, and number of newspapers, periodicals, and books printed,—the number of rope walks, and value of cordage,—value of nautical instruments, and of carriages and wagons,—the number of flour, grist, saw and oil mills, and barrels of flour, and value of other produce made—value of ships and other vessels, and the number and value of houses of brick, stone and wood.

In the great number and variety of articles, with sometimes an indistinctness in the classification, it is to be apprehended that the task will be so imperfectly executed, as to make the result of little value. An accurate return however of these statistics is a great desideratum, and it is to be hoped that the utmost care will be given to the faithful execution of the law.

The year 1839, will probably prove to have been, in regard to the amount of the fruits of agriculture, above the average of productiveness, but the amount of products of manufacturing industry, and the rate of current prices have been below the average of several late years. The census therefore, founded on the returns of this year, will not serve as a fair index of the average productive industry of the country. It will be particularly deficient in exhibiting the quantity and value of American manufactures. The population which is to be taken as it existed on the 1st of June of the present year, will exhibit a different distribution from that which would have been found to exist on some former years. The population of the cities, some of them at least, will be less, in consequence of the number of laborers and mechanics who have deserted them for want of employment.

The scrupulous accuracy of the Census is a matter of the utmost importance. Men therefore ought to be appointed for the performance of the duty, on whose integrity and precision entire confidence may be placed. Its results are relied upon for many purposes. Among others for the due partition of the political power among the several States. There are some reasons for supposing that gross mistakes have been made in some cases heretofore. There are errors of certain descriptions, such as inaccuracies in the classification of the population with the desired precision according to age, and in the enumeration and estimate of the different products of industry, which may be considered as inevitable. These have perhaps been given with as near an approach to accuracy, as could be expected. Yet some curious anomalies will be observed on a careful examination of the returns. For example it will be observed that a tenderness has been manifested towards females in reporting their ages, so that there appears to be a disproportionate number of the sex in their *teens*, compared with those of ages somewhat more advanced. From this, or some other cause not explained, the number of females returned in Massachusetts, by the census of 1830, as between 15 and 20 years of age, is greater than the number between 10 and 15, although it is well known the number must be less. The numbers above 20 are in a similar proportion less, and in a larger degree less than the number of males. The return of the white population of the United States gives an excess of males over females of 15 years of age and under, and also between 20 and 40, equal to near 5 per cent. But for the period from 15 to 20, the return gives an excess of 4 per cent in the number of females. This anomaly it is evident does not exist in nature, but it is the result of the inaccuracy of the returns.

Another evident inaccuracy is to be observed in the great disproportion in the number of black people returned, of extreme age. For example, Massachusetts is represented by the census of 1830, as having a population of 7,045 free blacks, of whom 39 are females a hundred years old and upwards. On examining the official publication of the census, to ascertain where these aged black women are to be found, the reader will learn to his surprise that 34 of them are domiciled in the county of Franklin, and in the town of Erving's Grant, one of the smallest towns in the State. On examining more particularly the returns for that town, he will find that the colored inhabitants, of all ages under 100, equal precisely the number returned as of 100 and upwards; whence it may safely be inferred, that the number which is thus made to represent centenarians, was intended to show merely the sum total of that class of population in the town, of all ages. It is not so remarkable that such an error should have occurred in the return, as that it should have escaped correction.

These facts are not stated for the purpose of producing a distrust



of the general census, but to show the unreasonableness of relying upon it for minute accuracy, especially in the classification of the population by age, and the uselessness of creating so great a number of classes.

It has always been observed that among illiterate people the official reports of the population afford a much greater proportion of cases of longevity, than those of people whose ages may be supposed to be determined by authentic records. There is no reason to believe that the blacks of this country are so long lived as they are represented in the census above referred to. According to this census there are 655 free colored persons and 1424 slaves in the United States over a hundred years old, in a population of 319,599 of the former class, and 2,009,043 of the latter, while of the whole white population who have reached that age, the number is but 539, in a total of 10,526,248.

---

## ARTICLE IX.

### ARCTIC DISCOVERIES IN AMERICA.

About the end of the fifteenth and the beginning of the sixteenth century, the English navigators and merchants turned their attention to the Northern shore of America in the hope of discovering in that quarter a passage by which they might arrive at the Western coast of Asia, by a more expeditious route than that around the Cape of Good Hope. It had been suggested long before, that such a route might be practicable, and it had been attempted under the patronage of the Portuguese Government as early as the beginning of the sixteenth century by the brothers Cortereal, whose discoveries however can hardly be separated from a cloud of fable. So far as we can understand what remains of their voyages, they appear to have penetrated as far as the entrance of Hudson's Bay. At the period of which we speak, little or nothing more was known of their success, and the English voyagers started for seas to them entirely unknown. We do not propose to trace these voyages directly.—Private enterprise and public liberality fitted out several expeditions, which, without succeeding in the great end which they proposed, added largely to the stock of geographical knowledge respecting the Northern shores of the Continent. In these voyages Baffin, Fro-bisher, Davis, Fox and Hudson distinguished themselves for their enterprise and sagacity. From the year 1681, when the expedition of Fox and James sailed, little was done for more than one hundred years. In 1668 the Hudson's Bay Company was established, and under their auspices and those of some private merchants two or three expeditions were fitted out, which proved however signal failures.

At the beginning of the present century then, the geographical knowledge of the Northern coast of America amounted to this.—Baffin's bay had been explored and laid down by the navigator whose name it bears, but the very existence of the Northern part of it, and all the detail of its coasts, rested on his unsupported authority and was somewhat doubted by some geographers. The southern and western shore of Hudson's Bay was pretty well explored, and laid down as far north as Repulse Bay. Captains Fox and Middleton had at different times discovered Southampton island, and sailed through the two channels on its eastern and western coasts, but they seem to have made little or no exertions in exploring them.

In 1818 the British government once more turned its attention to the long neglected north-west passage, and fitted out an expedition consisting of the *Isabella* under the command of Capt. John Ross, and the *Alexander* under Lieut. Parry. These vessels made what was considered by Capt. Ross a thorough exploration of Baffin's Bay. They proved the general truth of Baffin's statements and the officers were enabled by the superiority of their instruments to make very accurate observations whereby they could correct many of the details of his charts. Capt. Ross however excited the disapprobation of his officers, by making what was esteemed too careless observations of various sounds and inlets on the coast, which he summarily pronounced bays, when he thought he discovered ridges of land closing them in the distance, without taking the precaution of a closer examination by his boats or ships. He returned the same year that he sailed.

The dissatisfaction which his officers had felt, as to his conduct of the survey, had been particularly strong with Lieut. Parry, who had especially considered Capt. Ross as mistaken in leaving Lancaster Sound without a more full investigation of its head. As second in command he had not been privileged to act otherwise than to obey orders. He had not been consulted on the occasion and he declared that Capt. Ross's course was to him entirely unaccountable. Capt. Ross stated in a note contained in his account of his subsequent voyage that he was entirely unaware that such a feeling as this existed among his officers, and complains that he was not notified of it when he could have profited by it.

This dissatisfaction extended so far, that in the ensuing year (1819) the Admiralty fitted out a second expedition consisting of the *Hecla* and *Griper*, under the command of Lieut. Parry, to investigate those points which Capt. Ross was thought to have left incomplete. This officer entered Lancaster Sound, July 30th of the same year; his passage was entirely unimpeded by the obstacles which had been supposed, and he proceeded the same summer beyond the meridian of 110 degrees west longitude, having passed through Lancaster and

Barrow's Straits, sailed 120 miles down Regent's inlet and laid down several islands both east and west of his course. He passed the winter at Winter Harbour on Melville Island about 110 degrees west longitude. The next summer proved very unfavorable for Arctic navigation and he advanced but little farther, and the same year (1820) he returned to England.

The discoveries which we have alluded to as being made before the present century were those which had been made by sea. Besides these, in the year 1772, Hearne made an adventurous inland tour, into the Arctic regions of America in company with a tribe of Indians, and saw a river to which he gave the name of the Coppermine River, flowing northerly, and traced it to its mouth in the Arctic Ocean. Seventeen years after, Mackenzie, afterwards Sir Alexander Mackenzie, made the discovery of Mackenzie River in the north-western part of North America flowing north-westerly to the sea.—The accounts of these travellers had always been received with considerable suspicion, but at the time the expedition under Capt. Parry which we have just mentioned was fitted out, Capt. John Franklin, in company with Dr. Richardson, a Surgeon, and Messrs. Hood and Back, Midshipmen in the British Navy, were sent to Hudson's Bay to make arrangements there for descending the Coppermine River and the survey of the sea at its mouth if it should prove possible to attain it. Capt. Franklin arrived in America late in the year 1819. The ensuing summer was spent in crossing the country to Great Bear Lake and erecting fort Enterprise, together with the arrangement of the necessary preparations for the expedition which started on its discoveries in the spring of 1821; consisting, besides the gentlemen above named, of several Canadian voyagers embarked in two bark canoes. The navigation of the river is difficult, but the voyagers finally reached the sea after travelling three hundred and thirty four miles from fort Enterprise, more than one third of which they travelled on foot with their baggage and canoes.

On arriving at the sea Capt. Franklin coasted along the shore as far as the point which he named point Turnagain, where the murmurs of his rebellious crew of Canadians, the inclemency of the season, the state of his vessels, and the want of provisions prevented his farther progress. He had not passed nearly the distance in a direct line which the winding of the coast had led him; a deep inlet, which he named Bathurst's inlet, and Melville Sound, interrupted his progress, as his vessels were entirely unfit for any but coast navigation.

From point Turnagain therefore the expedition returned to fort Enterprise. On their return they proceeded to Hood River a small stream which empties into the sea two or three hundred miles east of Coppermine River, to the south east of Cape Barrow, and there reducing their canoes to smaller sizes they sailed up that stream, to

return to the fort by an overland route. On their return they were surprised by a premature Arctic winter. The game was driven to the South, the provisions were exhausted, the Canadians became refractory and refused to carry the canoes, the loss of which added greatly to the exposure; so that at the close of the expedition only eleven of the party of twenty survived; seven having perished from the inclemency of the season, Mr. Hood having been shot by a Canadian, who was in turn killed by the survivors, in the fear of future similar attacks. In the ensuing spring the English party returned to Great Britain.

While Captain Franklin in his birch canoe was exploring the shores of the Arctic Ocean, Captain Parry was attempting to arrive at that ocean through Hudson's bay, and Sir Thomas Roe's Welcome. In the *Fury* and the *Hecla* he re-explored Repulse bay and examined the coast of what he called Melville Peninsula, in the hope of finding a passage. He passed the winter of 1821—22, at the mouth of Lyon Inlet, which he had explored the preceding year, and in the summer of 1822, sailed as far as Iglookik, an island in a Strait called Fury and Hecla Strait, which, it was hoped, would afford the desired passage. The spring of 1823 however, gave no indications of the breaking up of the ice in this Strait. Walking parties had announced that it communicated on the west with an unbroken sea of ice, which, it was hoped would prove to be the Arctic Ocean, but the severity of the summer was such that it was not till the seventh of August, that the vessels were enabled to reach the open sea. At this time the stores remaining were only sufficient to permit one vessel to remain another winter in these regions, and as the scurvy had broken out among the crew, whose strength was impaired by the sufferings of two winters, it was concluded best to return to England.

The next expedition was made with the same vessels in the ensuing summer, with the hope of proceeding through Regent's Inlet to the Arctic Ocean. The navigators were much delayed by ice in Davis's Straits, they did not enter Lancaster Sound till Sept. 10, and only arrived in Port Bowen on the eastern side of Regent's Inlet in time to winter. The spring of 1825 was uncommonly early, and the expedition left its harbor on the 19th of July, and proceeded down the inlet, very slowly however, being interrupted by fragments of ice which pressed closely against the vessels. In this manner on the 1st of August, they had arrived at the point afterwards called Fury Point, where the *Fury* received such severe shocks that she was pronounced unfit to proceed. The *Hecla* therefore took on board her consort's men, the stores being left on the shore, and returned to England the same autumn.

Contemporaneously in part with this expedition, was another combined one fitted out by the English government, to attempt the



passage on the western side. Capt. Beechey of the English navy was sent out in the *Blossom*, with directions to pass through the Pacific ocean, and having passed Behring's Straits to double Icy Cape and explore the coast to the eastward as far as he might be able in the summer of 1826. At the same time, Capt. Franklin and the other gentlemen who had served with him in 1821 were again sent out for an overland expedition, for which every preparation had been made. They were to proceed to the sea by sailing down Mackenzie's river and there to survey it, by a division of their party, both east and west of the mouth of that river. This river had been originally discovered by Mackenzie in 1789, and he affirmed that he had penetrated as far as the sea at its mouth, but till the return of this expedition his statements had not been considered as fully trustworthy.

After making all preparatory arrangements, the party consisting of about forty men arrived at Fort Franklin on Great Bear Lake where they were to winter, in the autumn of 1825. Capt. Franklin took occasion that year to explore the Mackenzie to its mouth. The ensuing spring they sailed down the river in four boats of an improved construction built for the purpose in England. On arriving at the mouth of the river the party separated, a part under Capt. Franklin proceeding westerly along the coast in two boats, and the remainder under Dr. Richardson, sailing east. This latter expedition arrived with little interruption at Coppermine river, completing the survey of the coast between these two rivers, and returned up the Coppermine to Great Bear Lake. Capt. Franklin sailed westerly, a good deal interrupted by ice and fogs, along a low coast, occasionally meeting with tribes of Esquimaux, with whom he had intercourse, as far as Return Reef, when on the 16th Aug. he felt himself bound, by his instructions to return. His retreat was safely effected, and the two parties united, passed the winter at Fort Franklin.

Capt. Beechey in the *Blossom*, meanwhile doubled Icy Cape, and sailed along the coast southeasterly. The reefs and ice however soon obstructed the passage of his vessel, but he despatched Lieut. Elson in a boat who coasted along as far as a point which he called Pt. Barrow, where he arrived on the 26th of August. Here his boat was so much beset by ice that he was obliged to return. We are told that he was even then obliged to cut through the ice with saws, for a distance of half a mile. He had established signals for Capt. Franklin, in case he should arrive here, with provisions and directions for his farther progress. Pt. Barrow is distant only about 150 miles from the extreme point visited by Franklin, and the two parties left these points at only ten days interval. Capt. Beechey visited the coast again in the ensuing summer, and was much disappointed to find the signals he had established for Capt. Franklin untouched. He made no farther discoveries.

Arctic discovery from this time, ceased till the year 1829, when Capt. Ross, who was anxious to retrieve the credit he had lost in his first expedition, sailed from England in the *Victory*. This expedition was fitted out by subscription among the friends of Capt. R. and those interested in Arctic discovery. The construction of the *Victory* was peculiar, and it was hoped that she would be particularly well adapted for Arctic navigation. She was fitted with a steam engine, and paddles which by an improvement devised for this occasion, could be immediately sunk into, or removed from, the water. As a favorable wind in the Arctic seas frequently counteracts its other advantages by packing the floating ice before the navigator, it was hoped that this arrangement, enabling the vessel to go against the wind, would give it a command of open sea which a sailing vessel could not enjoy. Very few days had elapsed however after the *Victory* had sailed, before this steam apparatus gave way, and after several ineffectual attempts to repair it, it was finally condemned as useless. The *Victory* was to try the same passage as the *Fury* and *Hecla* had attempted in their last voyage, that through Regent's Inlet.

The expedition was a failure. Capt. Ross, satisfied that Regent's Inlet was a deep gulf, advanced no farther than Felix Harbor, whither he had arrived by a favorable run the first summer. The second summer his vessel advanced but seventeen, and the third but four miles in returning. In the long winters which intervened however, and the time the whole party had at their disposal, many overland expeditions were made which proved highly useful. In his vessel Capt. Ross had explored the western shore of Regent's Inlet, to which he had given the name of Boothia Felix, in honor of Mr. Felix Booth, Sheriff of London, whose assistance had been valuable in fitting out the expedition. Walking parties ascertained however that but a short distance across the country there was another sea or strait, and that beyond that, which was at this time frozen over, was yet another region, which received the name of King William's Land. In one of these expeditions was ascertained the precise situation of the Magnetic Pole at that time, where the dipping needles pointed directly downward into the earth.

In the spring of 1832, Capt. Ross found his provisions so far exhausted, and his vessel so far shattered and beset by ice, that he thought it inadvisable to attempt to return in her. He accordingly left her with his men, and by a long and tedious journey arrived at Fury Pt., where he took the three boats of the *Fury*, and in them sailed for Baffin's Bay. The first year he was intercepted by ice, and returned to winter at Fury Pt. The second year he was fortunately discovered and relieved by the *Isabella*, whaler, in which vessel he arrived in England, in Oct. 1833. It is a little singular that this was the identical vessel he commanded in his first expedition.

Capt. Ross seems to have imagined from the discoveries of his expedition, and from the information he received from the Esquimaux, that Regent's Inlet was proved to be a deep gulf, communicating by Fury and Hecla Straits, with Hudson's Bay, and extending nearly to Repulse Bay, but having no communication with the Western Arctic Ocean. There were very plausible grounds for the formation of such an opinion. The direction of the coast of Boothia, as he last saw it, gave very little ground for a belief in a water communication in that direction between the seas. In the summer of 1834 however, discoveries were made which made this point much more doubtful.

Capt. Back, who had gone out with Capt. Franklin in both his expeditions, hearing that an expedition was in contemplation which by an overland route should attempt to obtain some tidings of Capt. Ross whose protracted absence had occasioned serious alarm among his friends, offered himself for the command. His services having been accepted, in 1833 he embarked for America, and having organized his party, spent the winter of 1833 '34 in Fort Reliance, which he had built on the eastern end of Slave Lake. His intention was to sail in the ensuing summer with two boats, down the Thlewecho, or Great Fish River, which the Indians had uniformly represented as rising near this point. It was expected that this river would prove to be the Back's river of Capt. Franklin, which empties into the head of Bathurst's Inlet. In the winter of 1833 despatches reached Capt. B. announcing the return of Capt. Ross. The expedition however was to be continued for scientific purposes.

In the spring of 1834 therefore, having transported his baggage across by a series of streams, lakes and portages, to Lake Sussex, the head of the Thlewecho, Capt. Back embarked on his new voyage of discovery. Circumstances had required him to use but one boat instead of two as had been proposed, this was built at Fort Reliance, and in it were embarked a party of 12 men mostly Canadians. It soon appeared that the Thlewecho was not identical with Back's river and its course bent so much to the east that some fears were entertained that it would empty into Hudson's Bay. But when they had arrived near Wager Bay the river again turned towards the North and emptied into the Arctic Ocean, at a point directly south of the portion of Boothia visited by Ross. Capt. Back explored the large estuary into which the river falls as far as his limited means would permit, and then returned to Fort Reliance.

These two expeditions rendered the question of a N. W. passage more mysterious perhaps than ever. Capt. Ross when at his most southerly point, where he had passed his first winter in the Victory, from the accounts of the natives, and the direction of the coast as he saw it, had entertained no doubt that Regent's inlet was a gulf, to the extremity of which he had given the name of the gulf of Boothia.

He was perfectly satisfied that no navigable passage existed between this gulf and the western Arctic Ocean. On this supposition Boothia would prove to be connected with the continent of America.

Capt. Back's expedition materially affected this supposition. He found the Thlewecho discharging itself into the open sea at a point where by Ross's supposition there would have been presumed to be solid land. The sea at the mouth of the Thlewecho must connect with the ocean, and Capt. Back presumed that it extended on the west as far as Pt. Turnagain, but the lateness of the season foiled his attempt to proceed thither. On the east he supposed that it communicated in some way with Regent's Inlet.

In this state of extreme doubt as to the northern coast of our continent, the Hudson's Bay Company, which had hitherto engaged only indirectly in these discoveries, decided in 1836 to undertake certain expeditions which should complete the whole. The attentive reader will observe that three portions of the coast were yet unexplored; 1st. that to the west of the river Mackenzie, between Return Reef or Point Beechy of Franklin and Point Barrow of Capt. Beechy; 2d, that between Pt. Turnagain of Franklin and Ross's Pillar, or Pt. Richardson, Capt. Back's farthest point to the west, and lastly, that between Cape Hlay, Back's most eastern point and some other known sea. To the supervision of these expeditions Messrs. Simpson and Dease, officers in the Company's service, the latter of whom had been engaged in Capt. Franklin's last expedition, were appointed. These gentlemen having made all their arrangements sailed down Mackenzie river in 1837 and by great exertions completed the survey of the western coast. They were not able to proceed in their boats the whole way, but from Boat Extreme Mr. Simpson finished the journey with a party of men on foot, and in an Esquimaux canoe. A detailed narrative of this voyage is given as a sequel to this article.

Having succeeded thus far, they attempted in the ensuing summer to perform the second part of their duty, crossing Great Bear lake to Dease river, which falls into Dease Bay, and thence crossing by Dr. Richardson's route to a navigable part of Coppermine river, where they took their boats in hopes of exploring the coast east of Point Turnagain. On account of the severity of the season however, this attempt failed, and they proceeded no farther than Cape Alexander. Their narrative of this expedition is also subjoined.

This attempt was repeated last summer with much greater success. Within the last two weeks accounts have reached us from England giving the narrative of the results of this expedition, in which the voyagers passed Pt. Turnagain and Cape Alexander, and sailed round the coast of a magnificent bay, to a point where the coast suddenly changed from North to East South East, forming a narrow strait through which they passed to Point Richardson and Thlewecho river. They cross-



ed the estuary at the mouth of this stream and extended Capt. Back's discovery several miles farther to the east. When they were obliged to return, the coast was trending to the south, probably at the beginning of the gulf described by the Esquimaux as the termination of Prince Regent's Inlet. On their return Messrs. Dease and Simpson explored the northern shore of the strait which they had previously discovered, crossed again to the remarkable cape mentioned above, to which they have attached no name, and which we would suggest should be called from its discoverers, and having skirted the southern coast of a new country discovered by them to the north of the continent, called Victoria Land, for more than one hundred miles, recrossed to Cape Barrow, and after this long and successful voyage, returned to Fort Norman. The narrative of this expedition also is below.

There remains then but one portion of the northern coast unexplored, that between the eastern point of this voyage and Prince Regent's inlet. There seems to be little doubt that such a communication will be found; the accounts of the Indians are as usual indefinite, and though in a degree they tell against this supposition, deserve but little weight. The Esquimaux met by Ross on the coast of Boothia were perfectly acquainted with the western sea and gave him two or three accounts of channels connecting it with the inlet, all of which prove to be series of lakes with low ridges of land intervening. Some of them had been at Iglookik on the shore of Hudson's Bay and they traced on the charts the route between that station and that in Boothia without alluding to any such points as the estuary of the Thlewecho. A slight misunderstanding on the part of the natives however, who are but very indifferent geographers, would account for this omission. We may observe however, in passing, that there is no stronger evidence for the passage between the Thlewecho and Regent's inlet than a person at Alexandria, who knew the situation of the Red sea might have of finding a navigable channel thither; there is nothing in the direction of the land which makes the existence of a passage absolutely certain.

The mass of evidence however, uniting the principal part of the Esquimaux accounts with the known facts, induces the supposition of a line of coast similar to that laid down on the annexed map. It is to be hoped that this question may be settled and the northern geography of America fully fixed this summer, by an expedition such as Mr. Simpson proposes, through the Thlewecho to its mouth and thence eastwardly along the coast.

In 1836, when the expeditions of Messrs. Simpson and Dease were planned, it was hoped this survey would be completed before this time. In June of that year Capt. Back had again sailed, under orders from the Admiralty in the *Terror* bomb ship for Hudson's bay, intending at the head of Repulse or Wager bay to cross Melville peninsula, carry-

ing with him suitable boats for exploring Regent's inlet. Capt. Back attempted to shorten his passage by passing to the north of South-ampton island. In this strait however his vessel was arrested by the ice, and in this situation, without an opportunity to anchor, he passed the winter. In the spring the vessel proved to be so much injured by the ice that it was necessary to return at once to England, the main objects of the expedition being yet unaccomplished.

The map accompanying this number intended to illustrate the accounts of the different voyages, has been compiled from the official reports and charts of the several travellers.

---

**NARRATIVE OF THE FIRST TOUR OF DISCOVERY IN THE ARCTIC REGIONS OF AMERICA BY MESSRS. DEASE AND SIMPSON.**

Published in the London Morning Chronicle of April 19, 1838.

The lively interest which the British public have for such a length of time manifested in the further discovery of the Arctic regions, induced the Hudson's Bay Company to determine on equipping an expedition, solely at their own expense, and composed of their own officers and servants, with the view of endeavoring to complete the survey of the northern shores of the American continent.

The formation and equipment of the expedition were entrusted to Mr. Simpson, the resident governor, in the spring of 1836. That gentleman, on his arrival from England at the Norway House, Lake Winnipeg, in the month of June of the same year, beat up for volunteers for this arduous service; two active and enterprising leaders, Messrs. P. W. Dease and Thomas Simpson, and twelve men, were immediately selected and forwarded with the necessary supplies to Fort Chipewayan, Athabasca Lake, where they passed the winter of 1836-7. Immediately after the opening of the navigation, on the 1st June, 1837, the party started from Fort Chipewayan in two small boats, which they had constructed in the course of the winter, descended the Slave river, passed the western end of Great Slave Lake, where they were detained several days by ice, and descended Mackenzie's river to Fort Norman, where they arrived on the 1st July. From Fort Norman they despatched two of their party, with two other men belonging to Fort Norman, to the eastern end of Great Bear's Lake, for the purpose of erecting a small establishment at which they might take up their quarters for the following winter, and of laying up a stock of provisions preparatory to an extension of their survey in the summer of 1838. These arrangements being made, Messrs. Dease and Simpson, with the remainder of their people, forming a party of twelve in all, continued their route down the Mackenzie, and reached Fort Good Hope, the most northern establishment belonging to the Company, on the 4th, where they found an assemblage of Hare and Loucheoux Indians, from whom they learned that the Esquimaux had killed three of their party a short time previous, which prevented the discoverers' taking an interpreter from that tribe.

On the 9th July they reached the ocean by the most westerly mouth of the Mackenzie, making its situation in lat. 68 deg. 49 min. 23 sec. N., long. 136 deg. 36 min. 45 sec. W. They had proceeded but a short distance to seaward, when a party of nineteen Esquimaux went off to them from Tent Island, who showed a disposition to be troublesome, but returned to their encampment when they found the party prepared to defend themselves, if necessary. The progress of the party along the coast was very slow, owing to frequent obstructions from ice, cold, dense fogs and strong head winds. On the afternoon of the 11th they reached Point Kay, where they found another encampment of Esquimaux, and where they were detained by a compact body of ice, occupying Phillips Bay, until the 14th. They continued their route until the 17th, when an unbroken pack of ice, extending to the seaward, made them seek the shore in Camden Bay, near a large camp of Esquimaux, who received them kindly. In the afternoon there appeared a narrow passage of water through the ice stretching outwards, and they immediately embarked, but had not proceeded above three miles from the land, when the ice suddenly closed upon them, squeezing one of their boats, which, with their provisions and baggage, they had much difficulty in saving, and by means of portages from one piece of ice to another, the oars serving as bridges, they finally got on a large floe, where they passed an inclement and anxious night. On the 20th they reached Foggy Islands Bay, when they were stopped by the ice and a violent Northeast wind, until the 23d, having on the preceding day made an ineffectual attempt to weather Point Anxiety, in which they narrowly escaped with a thorough drenching. The latitude ashore was 70 degrees, 9 min. 48 sec. From this situation they had the satisfaction of discovering a range of the Rocky Mountains, to the westward of the Romanzoff chain, and not seen by Sir John Franklin, but being within the limit of his survey, called it the Franklin Range, as a just tribute to his character and merits. That evening they reached Sir John Franklin's Return Reef, where their survey commenced, that officer having got no farther. Return Reef is one of a chain of reefs which run for twenty miles parallel to the coast, at the distance of about half a league, affording sufficient water within for their small craft. The main land is very low. From Point Berens\* to Cape Halkett it forms Harrison's Bay, fifty miles broad by about a third of that distance in depth. At the bottom of this bay another picturesque branch of the Rocky Mountains range rears its lofty peaks above these flat shores, which they named Pelley's Mountains, in honor of the Governor of the Company. At their base flows Colviles river, two miles broad at its mouth, to the southwest of which stands Cape Halkett, where they were detained by a northeast gale the whole of the following day. The country extending to the foot of the mountains appeared to consist of plains covered with short grass and moss, a

\* The different Rivers, Capes and other remarkable objects between Franklin's Return Reef and Beechey's Cape Barrow, were named by Messrs. Dease and Simpson after the Governor and Directors of the Hudson Bay Company, and other gentlemen connected with the fur trade.

favorite resort of reindeer, of which they saw numerous herds. Observations were obtained, determining Cape Halkett to be in lat. 70 deg. 43 min. N., long. 152 deg. 14 min. W.—the variation of the compass 43 deg. 8 min. 33 sec., E.

Next morning, 26th July, they passed the Gany, a river about one mile broad.

From Cape Halkett the coast turned suddenly off to the W. N. W. It presented to the eye nothing but a succession of low banks of frozen mud. In the evening they passed the mouth of a large stream, which they named Smith's River. From thence, for about nine miles, the coast line is formed of gravel reefs, near the extremity of which at Point Pitt, the land stands more to the westward. Here they were detained by the ice until the following afternoon, (27th,) when an opening presenting itself, they resumed their route. It blew a cutting blast from the northeast, and the salt water froze upon the oars and the rigging. Point Drew, seven miles distant from their last encampment, is the commencement of a bay of considerable size, but extremely shallow and much encumbered with ice. To seaward the ice was still smooth and solid as in the depth of a sunless winter. At midnight they reached a narrow projecting point, across which some peaks of a high iceberg appeared. This point they named Cape George Simpson, as a mark of respect for the Governor of the Company's territory, to whose excellent arrangements the success of the expedition is in a great measure indebted.

This point was destined to be the limit of their boat navigation; for during the four following days they were only able to advance as many miles. The weather was foggy and dismally cold. The wild fowl passed in long flights to the westward, and there seemed little prospect of their being able to reach Beechey's Point Barrow by water. Boat Extreme is situated in lat. 71 deg. 3 min. 24 sec. N.; long. 154 deg. 26 min. 30 sec. W.; variation of compass 42 deg. 36 min. 18 sec. E.

Under these circumstances Mr. Thomas Simpson undertook to complete the journey on foot, and accordingly started on the 1st of August with five men, Mr. Dease and the other five men remaining in charge of the boats.

The pedestrians carried with them their arms, some ammunition, permican, a small oiled canvass canoe, for the crossing of rivers, the necessary astronomical instruments, and a few trinkets for the natives.

It was one of the worst days of the whole season, and the fog was so dense that the party were under the necessity of rigidly following the tortuous outline of the coast, which for twenty miles formed a sort of irregular inland bay, (being guarded without by a series of gravel reefs,) the shore of which was almost on a level with the water, and intersected by innumerable salt creeks, through which they waded, besides three considerable rivers, which they traversed in their portable canoe. Next day the weather improved, and at noon Mr. Simpson had an observation for latitude in 71 deg. 9 min. 45 sec. The land now inclined to the southwest, and continued very low and muddy, and, as on the preceding day, abounding in salt creeks, whose waters were at



the freezing temperature. The party had proceeded about ten miles, when to their dismay the coast suddenly turned off to the southward, forming an inlet as far as the eye could reach. At the same moment they descried, at no great distance, a small camp of Esquimaux, to which they immediately directed their steps. The men were absent hunting, and the women and children took to their boat in the greatest alarm, leaving behind them an infirm man who was in an agony of fear. A few words of friendship removed his apprehensions, and brought back the fugitives, who were equally surprised and delighted to behold white men. They sat before the party fresh reindeer meat and oil.

Mr. Simpson now determined to adopt a more expeditious mode of travelling, by obtaining the loan of one of their "oomiaks," or family skin canoes, to convey the party to Point Barrow, with which, from a chart drawn by one of the women, it appeared that these people were well acquainted.

Four oars were fitted with lashings to this strange craft. Before starting, the hunters arrived, and presents of tobacco, awls, buttons, &c. were made to all the inmates of the encampment, with which they were highly gratified. Dease's Inlet is five miles broad at this place, yet so low is the land that the one shore is just visible from the other in clearest weather. It now again blew strongly from the northeast, bringing back the cold dense fog; but the traverse was effected by the aid of the compass. The waves ran high, and the skin boat surmounted them with great buoyancy; the party encamped on the west side of the inlet. The banks there were of frozen mud, ten or twelve feet high; the country within was perfectly flat, abounded in small lakes, and produced a very short grass; but nowhere had the thaw penetrated more than two inches beneath the surface, while under water along the shore, the bottom was impenetrably frozen. Not a log of wood was to be found in this land of desolation; but our party followed the example of the natives, and made their fire of the roots of the dwarf willow, in a little chimney of turf. Next morning, Aug. 3, the fog cleared for a while, but it was still bitterly cold, and the swell beat violently on the outside of a heavy line of ice which lay packed upon the shore.

To weather this was a work of danger; but the good qualities of their boat, after a severe trial, carried them safely through. The land ran out for five miles to the northward, then turned off to the N. W., beyond which, at Point Christie, the lat. 71 deg. 12 min. 36 sec. was observed. From thence the coast trended more westerly for ten miles, forming two points and a bay, which Mr. Simpson named after chief factors Charles and Rowand, and chief trader Ross. The party then came up to what appeared a large bay, where they halted for two or three hours, to await the dispersion of the fog, not knowing which way to steer. In the evening their wish was gratified, and the weather from that time was sensibly ameliorated. The bay was now ascertained to be only four miles in width; the depth half way across was  $1\frac{1}{2}$  fathoms, on a bottom of sand; that of Dease's Inlet was afterwards found to be two fathoms, muddy bottom, being the greatest depth be-

tween Return Reef and Point Barrow, except at ten miles S. E. from Cape Halkett, where three fathoms were sounded on our return. After crossing Mackenzie's Bay the coast again trended for eight or nine miles to the W. N. W. A compact body of ice extended all along, and beyond the reach of vision to seaward; but the party carried their light vessel within that formidable barrier, and made their way through the narrow channels close to the shore.

At midnight they passed the mouth of a fine deep river, a quarter of a mile wide, to which Mr. Simpson gave the name of the Bellevue, and in less than an hour afterwards the rising sun gratified him with a view of Point Barrow, stretching out to the W. N. W. They soon crossed Elson Bay, which, in the perfect calm had acquired a tough coating of young ice, but had much difficulty in making their way through a broad and heavy pack that rested upon the shore. On reaching it, and seeing the ocean extending away to the southward, they hoisted their flag, and with three cheers took possession of their discoveries in his Majesty's name.

Point Barrow is a long, low spit, composed of gravel and coarse sand, which the pressure of the ice has forced up into numerous mounds, that, viewed from a distance, assume the appearance of huge boulder rocks. At the spot where the party landed it is only a quarter of a mile across, but is broader towards its termination. The first object that presented itself on looking round the landing place was an immense cemetery. The bodies lay exposed in the most horrible and disgusting manner, and many of them appeared so fresh, that the men became alarmed that the cholera or some other dreadful disease was raging among the natives. Two considerable camps of the latter stood at no great distance on the point, but none of the inmates ventured to approach till our party first visited them, and, with the customary expressions of friendship, dissipated their apprehensions.

A brisk traffic then began, after which the women formed a circle and danced to a variety of airs, some of which were pleasing to the ear. The whole conduct of these people was friendly in the extreme; they seemed to be well acquainted with the character, if not the persons of white men, and were passionately fond of tobacco.

To the northward, enormous icebergs covered the ocean; but on the western side there was a fine open channel, which the Esquimaux assured the party extended all along to the southward, and so inviting was the prospect in that direction, that had such been his object, Mr. Simpson would not have hesitated a moment to prosecute the voyage to Cook's Inlet in his skin canoe. The natives informed him that whales were numerous to the northward of the point, and seals were everywhere sporting among the ice.

It was high water between one and two o'clock, A. M. and P. M. The rise of the tide was fourteen inches, and the flow came from the westward. Observations were obtained, which determine the position of the landing place to be in lat. 71 deg. 23 min. 33 sec. N., long. 156 deg. 20 min. 0 sec. W., agreeing closely with the observations of Mr. Elson. Then, bidding adieu to their good-humored and admiring entertainers, the party set out on their return.

They reached the western mouth of the Mackenzie on the 17th of August, and Fort Norman on the 4th of September, from whence their report is dated the following day.

From Fort Norman they were about to proceed to the easterly end of Great Bear's Lake, there to pass the winter, from thence to haul their boats across to the Coppermine River, and resume their survey to the eastward, at the opening of the navigation in July next, with the view of connecting the discoveries of Sir John Franklin and Capt. Back from Point Turnagain to Great Fish River, in which, from the activity and perseverance of the leaders, it is confidently hoped they will be successful.

---

NARRATIVE OF THE SECOND JOURNEY OF MESSRS. DEASE AND  
SIMPSON IN THE ARCTIC REGIONS OF AMERICA.

First published in London in April, 1839.

*Fort Confidence, Great Bear Lake, Sept. 15, 1838.*

Honorable Sirs,—It now becomes our duty to report the incomplete success of the expedition to the eastward this summer, in consequence of the extraordinary duration of the ice. Much, however, has been done to prepare the way for another attempt next year; and our hopes, instead of being depressed, are elevated by the knowledge so painfully acquired this season.

On the 6th of June, our boats were conveyed on the ice to the mouth of Dease's river (then just open,) the ascent of which was commenced the following day. With some assistance from Indians, we reached the portage, leading to the "Dismal" lakes, (discovered by Mr. Simpson last winter,) and carried the boats across it without accident. The ice on these lakes was still perfectly solid; and we were provided with iron shod sledges for the passage. On these we fixed the boats, and the wind being fair, hoisted sail, which greatly aided the crews on the hauling ropes. In this manner these frozen reservoirs, which are fully thirty miles long, were passed in two days, and we reached our provision station at "Kendall" river on the 19th. There we had the satisfaction to find two men (left there by Mr. S. in April) well, and their Hare Indian hunters successful in the chase. Two of these active fellows consented at once to accompany us along the coast, and proved not only good voyagers, but during our frequent detentions among the ice, killed so many reindeer as enabled us to save nearly half our summer stock of provisions. Next day (June 20) we proceeded to the Coppermine river, which we found still fast. It gave way on the 22d, and we descended all its "terrible" rapids at the full flood, while the ice was still driving. Below the Bloody Fall the river did not clear out till the 26th; and on the 1st of July we pitched our tents at the ocean. Two or three Esquimaux families were seen there, but they took the alarm and fled over the ice towards some distant island. Here and on various parts of the coast, a fine collection of plants was made by Mr. Dease.

We remained imprisoned in the mouth of the Coppermine, awaiting the opening of the ice, till the 17th of July. Our subsequent progress along the coast was one incessant, we may say desperate struggle with the same cold obdurate foe, in which the boats sustained serious damage, several planks being more than half cut through. At various points we saw caches of Esquimaux placed upon lofty rocks, out of reach of beasts of prey; but we did not fall in with any of the owners, who seemed to have all gone inland to kill reindeer, after their winter seal hunt among the islands. Fragments of Dr. Richardson's mahogany boats were found widely scattered, and many articles left by this party at the Bloody Fall were carefully preserved in the native keepings. On the 29th of July we at length succeeded in doubling Cape Barrow. The northern part of Bathurst's Inlet was still covered with a solid sheet of ice, and instead of being able to cross over direct to Point Turnagain, we were compelled to make a circuit of 140 miles by Arctic Sound and Barry Island. On the easternmost of that group, Mr. Simpson discovered, at the base of a crumbling cliff, several pieces of pure copper ore, and the adjacent island had also the appearance of being strongly impregnated with that metal. A series of specimens of all the principal rocks along the coast was preserved. In order to attain Cape Flinders, we had to perform a portage across an island, and several over the ice. On the 9th of August we doubled that cape, and in a little bay, three miles to the southward of Franklin's farthest encampment in 1821, our boats were finally arrested by the ice, which encompassed them 22 days; so different was the season of 1838 from that of 1821, when Franklin found a perfectly open sea there on the 16th of August. In June, the early part of July, and the middle of August, we had frequent storms, accompanied by snow and frost; but during the greater part of July and the beginning of August, calms prevailed, which together with the severity of the preceding winter, we considered as the cause of the tardy disruption of the ice this season.

On the 20th of August we were obliged to relinquish our hopes of advancing further with the boats. That our efforts might not, however prove wholly fruitless, Mr. Simpson offered to conduct an exploring party on foot for ten days. It was at the same time arranged between us that in the event of any favorable movement taking place in the ice, Mr. Dease should advance with one boat. Signals were agreed upon to prevent our missing each other on the way; and should we unfortunately do so, the last day of August was fixed for the rendezvous of both parties at Boat Harbor. That unlucky spot is situated in latitude 68 deg. 16 min. 25 sec. N., long., 109 deg. 20 min. 45 sec. W.; variation of the compass 49 deg. E. Mr. Simpson's narrative of his journey and discoveries to the eastward is annexed.

On the 21st of August we cut our way out of our icy harbor—the grave of one year's hopes; and having the benefit of fair winds, crossed Bathurst's Inlet among Wilmot Islands, and safely re-entered the Coppermine River on the 3d of September. The following day we proceeded to the Bloody Fall, and there secreted our superfluous provisions. The ascent of the Coppermine, (hitherto deemed impractica-



ble) to near the junction of Kendall River was accomplished on the 5th day. We deposited the boats in a woody bluff, where they can be conveniently repaired next spring; then taking our bundles on our backs, we traversed the barren grounds, and returned to winter quarters yesterday.

Here we had the satisfaction to find every thing in good order, the buildings rendered more comfortable, and some provisions collected. Our return so much earlier than we ourselves expected on leaving Point Turnagain, has enabled us to commence the fall fisheries in good time; and though our stock of ammunition and other necessities for the Indians is reduced very low, want no longer stares us in the face, as it did for several months after our arrival here last year. We are most happy to add that the natives have experienced neither famine nor sickness this season, the only death within our knowledge being that of a blind old man.

September 20th—We have the honor to acknowledge the receipt this afternoon of Governor Simpson's despatch of February 28th. As things have fallen out this season, it is fortunate that no party was sent down the Great Fish river to meet us; and from the experience we now possess of the coast to the eastward, we are of opinion that a retreat by the Coppermine may be effected, when the entire ascent of the Great Fish river would be no longer practicable. We feel deeply indebted for the confidence reposed in us, and the ample authority granted by the Governor's circular and previous letters to draw upon the resources of all parts of the country. This power we have hitherto used in extreme moderation, and we are glad to say that we are not reduced to the necessity of exercising it any further. One of our men leaves us in consequence of a bad complaint, and has been replaced by a servant from Mackenzie's River. To C. J. M'Pherson, the gentleman in charge of that district, we are indebted for valuable assistance in many ways, likewise to C. F. M'Leod, of Othabasca. Between them our order of last winter for an additional supply of pemican, dogs, sledge-wood, leather, ammunition, guns, axes and tobacco, has been completed, while the kind and prompt attention of chief trader Ross at Norway House, has filled the private orders of our people, for a part of which we now send to Great Slave Lake. By the same conveyance we discharge our Chippewayan hunters, as we are unable to provide them any longer with clothing.

Since writing the foregoing, we have been obliged to condemn one of our two sea boats. In its stead we shall transport an inland batteau, of a rather superior construction, built by Ritch, at Fort Chippewayan, two years ago, to the Coppermine next June, by the rout followed this year; making up the additional hands required to navigate such a craft with Hare Indian hunters. And to convey the expedition from this dreary abode at the close of our enterprise, we shall again require the aid of a boat from Mackenzie's river. With the utmost respect, we have the honor to remain, Hon. Sirs, your most obedient humble servants,

(Signed)

PETER W. DEASE.

THOMAS SIMPSON.

To the Governor, Deputy Governor, and Committee of the Hon. Hudson's Bay Company, London.

## NARRATIVE OF MR. SIMPSON.

After waiting with the boats from the 9th to the 20th of August, and despairing of being able to proceed any further by water, Mr. Simpson offered to conduct an exploring party on foot for ten days; it being agreed that in case of any favorable movement taking place in the ice, Mr. Dease should advance with one boat. The last of August was the day fixed upon for the rendezvous of both parties at the position where the boats had stopped, and which they denominated Boat Harbor. It is situated in lat. 68, 16, 25, lon, 109, 20, 45. Variation of the compass, 46 deg. East. Mr. Simpson's narrative of his ten days' exploration by land, we subjoin entire.

On the 20th day of August, the date appointed for the return of former expeditions from these desolate shores, I left our boats still hopelessly beset with ice, to perform a ten days' journey of discovery on foot to the eastward, and my companions were five servants and two Indians: we carried a wooden-framed canvass canoe, and nearly the same other baggage as on the journey to Point Barrow last year, with the addition of a tent for the nightly shelter of the whole party, on a coast almost destitute of fuel. Each man's load at starting weighed nearly half a cwt., and our daily progress averaged 20 geographical miles. About the middle of the first day's journey we passed the farthest point to which Sir John Franklin and his officers walked in 1821. Beyond that the coast preserved its NNE, trending to the encampment of the same night, situate on the pitch of a low cape, which I have named Cape Franklin. From the west to the northeast a new land, or crowded chain of islands of great extent, in many places high, and covered with snow, stretched along at the distance apparently of 30 miles, and led to the apprehension that we were entering a deep sound or inlet. The main land now turned up to ENE, which continued to be its general bearing for the three following days. It is flat, its outline or path leading alternately over soft sand, sharp stones, and swampy ground. At the distance of from one to two miles the coast is skirted by a range of low stony hills, partially clothed with dull verdure, which sends down to the seas numberless brooks and small streams; none of the latter at that season reached above our waist, though the deep and ragged channels of them showed that in the spring they must be powerful torrents. Two leagues inland, a hill, which I have named Mount George, after Governor Simpson, rises to the height of 600 feet, and forms a conspicuous object for a deep journey; on either side the ice all along lay immoveably aground upon the shallow beach, extending in every direction as far as the eye could reach. The great northern land still stretched out before us, and kept alive doubts of our having explored an immense bay, which, however, the increase in the tides, the quantity of sea weed, and the shells, and the discovery of the remains of a large whale and of a polar bear, could not altogether dispel. These doubts seemed almost converted into certainty as we drew near on the fourth evening an elevated cape and saw land apparently all around, with feelings of bitter disappointment. I ascended the height, from whose summit a splendid and unlooked for view suddenly burst upon me. The ocean, as if

transformed by enchantment, rolled its free waves beneath and beyond the reach of vision. To the eastward, islands of various shapes and sizes overspread its surface, and the northern land terminated in a bold and lofty cape bearing northeast, at least 40 miles distant, while the coast of the continent trended away to the south entrance of an ice-skirted strait. The extensive land to the northward I have called Victoria Land, in honor of our youthful Sovereign, and its eastern extremity I call Cape Pelly, after the Governor of the Hon. Company. To the promontory where we encamped I have attached the name of Cape Alexander, after an only brother who would give his right hand to be the sharer of my journies. The rise and fall of the tide there was about three feet, being the greatest observed by us in the Arctic Seas.

The coast here changes its character; the water becomes deep and the approach easy, and I have little doubt that the islands contain secure harbors for shipping. Next morning at the distance of 8 or 9 miles, we crossed another high cape, formed of trap rocks, in latitude 68, 52, 18, 5 N, the variation of the compass being 63 E. The traveling had become more and more toilsome, our road now passing over some miles of round loose stones, and then through wet mossy tracks sown with large boulders and tangled with dwarf willows. At our usual company hours we opened a large bay studded with islands which ran on five miles to the S. S. W., and then turned off in a bold sweep of rounded granite hills like those near Melville Sound, and Cape Barrow, dipping to the sight in the E. S. E., at the distance of 30 miles. The walk around even this portion of the bay would have consumed three days; the time allotted for out-going was already expired, and two or three of my men were severely lame from the fatigue of their burdens, the inequalities of the ground, and the constant immersion in icy cold water. I besides cherished hopes that by making the best of our way back, we might, agreeably to my arrangements with Mr. Dease, meet him bringing one of the boats, in which case, with an open sea before us, we could have considerably extended our discoveries before the commencement of winter. I may here remark, that we were singularly fortunate in the five days of our outward journey, the weather being so moderate and clear that I daily obtained astronomical observations; whereas, before our departure from the boats, and during our return to them, we had continual storms, with frost and snow, rain and fogs. Close to our furthest encampment appeared the site of three Esquimaux tents of the preceding year, with a little stone chimney apart. We passed the remains of a larger camp and the remains of several human skeletons near Cape Franklin, but throughout the journey we found no recent traces of that few and scattered people.

The morning of the 25th of August was devoted to the determination of our position, and the erection of a pillar of stones on the most elevated part of the point; after which I took possession of the country, with the usual ceremony, in the name of the Hon. Company, and for the Queen of Great Britain. In the pillar I deposited a brief sketch of our proceedings, for the information of whoever might find it. The situation is in lat. 68, 43, 39, N., long., reduced by C. T. Smith's watch

from excellent lunars at the boats, 106, 3, 11, W., the magnetic variation being 60, 38, 23, E. The compass grew sluggish and uncertain in its movements as we advanced eastward, and frequently had to be shaken before it would traverse at all. Two miles to the southward of our encampment a rapid river of some magnitude discharges itself into the bay, the shores of which seemed more broken and indented than those along which we had travelled. Independently of Victoria Land, and an archipelago of islands, I have had the satisfaction of fully exploring 100 miles of coast and of seeing 30 miles further, making in all, after deducting Franklin's half day's journey already mentioned, about 120 miles of continental discovery. This is, in itself, important, yet I value it chiefly for having disclosed an open sea to the eastward, and for suggesting a new route along the southern shore of Victoria Land, by which that open sea may be traversed, while the main land, as was the case this season, is yet environed by an impenetrable barrier of ice. Whether the open sea to the eastward may lead to Ross' Pillar, or to the estuary of Back, Great Fish River, it is hard to conjecture, though the trending of the most distant land in view should rather seem to favor the latter conclusion.

The same evening, on our return, we met the ice at Trap Cape, driving rapidly to the eastward; as we proceeded, the shores continued inaccessible. Several bands of buck reindeer were tracked to the southward, along the hills; two which we shot were in far superior condition to those in Bathurst Inlet and near the Coppermine; a few musk-oxen were also seen, and numerous flocks of white geese (*Anser Hyperboreus*), in general officered by large grey ones (*Anser Canadensis*), were seen assembling on the marshes, and taking their ærial flight to more genial climates. At dusk, on the 29th of August, our tenth day, we regained the boats, and found them still enclosed in the ice, which the north and westerly gales seemed to have accumulated from far and near, towards Point Turnagain.

THOMAS SIMPSON.

Port Confidence, Sept. 15, 1838.

---

NARRATIVE OF THE THIRD EXPEDITION OF MESSRS. DEASE AND SIMPSON.

Fort Simpson, Oct. 16, 1839.

HONOURABLE SIRS,—We have the honor to report the completion of all the primary objects of the expedition, the entire fulfilment of Gov. Simpson's original instructions, under which it has been our good fortune to act, and something *more*, though, as we plainly told your Honours last winter, it was quite out of the question to think of reaching the Strait of the Fury and Hecla from the Coppermine River.

On the 22d of June we descended the impetuous stream of the Bloody Fall, where we remained until the 28th. This interval was employed by Mr. Simpson in exploring Richardson River, discovered in 1838,



which discharges itself, as we then supposed, into the bottom of Back's Inlet, in latitude 67. 53. 57 North, longitude 115. 56 West. A party of about thirty Esquimaux were encamped there, all of whom fled precipitately to the hills, except one family, whose tent was placed on an island in this stream. With these last a communication was opened, through our interpreter, Ooligbuck; but the circle of their little lives being confined to Behren's Isles, and the borders of Richardson's River, they had no information to impart of any value.

On the 3d of July the first slight opening occurred in the ice, of which we took instant advantage; but our first week's journey did not exceed twenty miles, and it was the 18th, after sad work, before we could attain Cape Barrow. From its rocky heights we beheld, with equal surprise and delight, the wide extent of Coronation Gulph, partially open, whereas long after the same date in 1838, the whole party might have crossed it on foot. At midnight, on the 20th, we landed at Cape Franklin, just one month earlier than Mr. Simpson's arrival there, on his pedestrian journey of the year before. A violent easterly gale arrested our progress for the next four days; and on the 27th we encountered great peril in doubling Cape Alexander, amidst very heavy driving ice.

From Cape Alexander, situated in latitude 68. 56. N., long. 106. 40. W., to another remarkable point in lat. 68. 33. N., long. 98. 10. W., the Arctic coast may be comprised in one spacious bay, stretching as far South as lat. 67. 40 before it turns off abruptly northward to the last mentioned position. This vast sweep, of which but an inconsiderable portion was seen by Mr. Simpson last year, is indented by an endless succession of minor bays, separated from one another by long narrow projecting points of land, enclosing an incalculable number of islands.

From this description it will be evident that our route was an extremely intricate one, and the duties of the survey most harassing; but whilst perplexed beyond measure in finding our way through these labyrinths, we derived great advantage from the protection afforded by the islands from the crushing force of the seaward ice; and the weather was generally clear. In fact, the most serious detention caused by ice on this part of the voyage, was from the 1st to the 5th of August, on a point that jutted out beyond the insular chain.

White Bear Point, as it was called, lies in 68. 7. 8 N., 103. 36. 45. W.; variation 54. 45 E. These bays and masses of islands present a distinct succession of geological features, which can be best illustrated by our series of specimens of the rocks that compose this wild and barren coast. Vestiges of Esquimaux, and mostly old, were met with wherever we landed.

They appear to subsist in single families, or very small parties, and to travel inland for the deer hunt in the month of June, not returning to the sealing islands till the ice sets fast in October. A river, twice the size of the Coppermine, which falls into the sea in 68. 2. N., long. 104. 15. W., is much resorted to by reindeer and musk oxen, in the summer season. Finding the coast, as already remarked, tending north-

erly from the bottom of the Great Bay, we expected nothing less than to be carried round Cape Felix of Captain James Ross, contrary to the conjecture hazarded by Mr. Simpson, in his narrative of last year's journey. On the evening of the 10th of August, however, (at the point already given,) we suddenly opened a strait running into the southward of east, where the rapid rush of the tide scarcely left a doubt of the existence of an open sea leading to the mouth of Back's Great Fish River. This strait is ten miles wide at either extremity, but contracts to three in the centre. Even that narrow channel is much encroached upon by high-shingle islands, but there is deep water in the middle throughout. The 12th of August was signalized by the most terrific thunder-storm we have ever witnessed in these regions. Next day it blew roughly from the westward, with a very dense cold fog, but we ran rapidly south-east, past Point Richardson and Point Ogle of Sir George Back, and continued on till the darkness of night and the increasing gale drove us ashore beyond Point Pechell. The storm shifted to north-east, and lasted till the 16th, when we directed our course with flags flying to the Montreal Island. On its northern side our people, guided by Mackay, soon found a deposit made among the rocks, by some of Sir George Back's party, but, as Mackay seemed to think, without that officer's knowledge. It contained two bags of pemican, and a quantity of cocoa or chocolate, all perfectly rotten, besides an old japanned tin vasculum, and two or three other trivial articles, of which we took possession, as memorials of our having breakfasted on the identical spot where the tent of our gallant though less successful precursor stood, on his return from Point Ogle to the Great Fish River, that very day five years before. The arduous duty we had, in 1836, undertaken to perform, was thus fully accomplished; and the length and difficulty of the route back to the Coppermine, would have amply justified our immediate return. We had all suffered more or less from the want of fuel, and the deprivation of warm food, and the prospect grew more cheerless as the cold fall weather stole on apace. But having already ascertained the separation of Boothia from the American continent on the *western* side of the Great Fish River, we determined not to desist till we had settled its relation thereto on the eastern side also. A fog which had come on dispersed towards evening, and unfolded a full view of the picturesque shores of the estuary. Far to the south Victoria Headland stood forth so clearly defined, that we instantly recognized it by Sir George Back's exquisite drawing. Cape Beaufort we almost seemed to touch, and with the telescope we were able to discover a continuous line of high land as far round as north-east, about two points more northerly than Cape Hay, the extreme eastern point seen by Sir George Back.

The traverse to the farthest visible land occupied six hours' unremitting labour at the oar, and the sun was rising on the 17th, when we scaled the bluff and singularly shaped rocky cape to which our course had been directed. It stands in lat. 68. 3. 56. N., long. 94. 35. W. The azimuth compass by Jones settled exactly in the true meridian, agreed with two others by the same maker placed on the ground.

From our proximity to the magnetic pole the compass had latterly been of little or no use; but this was of the less consequence, as the astronomical observations were very frequent. The dip of the needle, which at Thunder Cove, (12th August,) was 89. 29. 35. had here decreased to 89. 16. 40. North. This bold promontory, where we lay wind-bound till the 19th, was named Cape Britannia, in remembrance of our glorious country. On the beetling rock that sheltered our encampment from the sea, and formed the most conspicuous object on all this part of the coast, we erected a conical pile of ponderous stones, fourteen feet high, that, if not pulled down by the natives, may defy the rage of a thousand storms. In it was placed a sealed bottle containing a sketch of our proceedings, and possession was taken of our extensive discoveries in the name of Victoria the First, amidst the firing of guns, and the enthusiastic cheers of the whole party.

On the 19th, the gale shifted from N. E. to E. S. E., and after crossing a fine bay, due east, with no small toil and danger, the coast bent away northerly, which enabled us to effect a run of forty miles. Next day the wind resumed its former direction, and after pulling against it all the morning, among shoals and breakers, and gaining only three miles, we were obliged to take refuge in the mouth of a small river.

From a limestone ridge, about a league inland, we obtained a view of some very remote blue land, in the N. E. quarter, in all probability one of the Southern promontories of Boothia.

Two considerable islands lay far in the offing, and others high and distant stretched from E. to E. N. E. Our view of the low main shore, was confined to five miles, in an easterly direction, after which it appeared to turn off greatly to the right. We could, therefore, scarcely doubt our having arrived at that large gulf uniformly described by the Esquimaux as containing many islands, and with numerous indentations stretching down to the southward, till it approaches within forty miles of Repulse and Wager Bays. The exploration of such a gulf, which was the main object of the Terror's ill-starred voyage, would necessarily demand the whole time and energies of another expedition, having a starting or retreating point much nearer to the scene of operation than Great Bear Lake, and it was quite evident to us that any further fool-hardy perseverance could only lead to the loss of the great object already attained, together with that of the whole party. We must here be allowed to express our admiration of Sir John Ross's extraordinary escape from this neighbourhood, after the protracted endurance of hardship unparalleled in Arctic story. The mouth of the stream which bounded the last career of our admirable little boats, and received their name, lies in lat. 68. 28. 27. N., long. 93. 7. W., variation of the compass, 16. 20. W.

The strong wind that had forbidden our advance gave wings to our retreat. The same night, (Aug. 20,) we landed once more at Cape Britannia, and next morning recrossed the inlet direct to Point Pechell, with a heavy sea. On the 22d we explored a long narrow bay, on the west side of Point Ogle, which extends to the parallel of latitude. The north wind blew roughly, with sharp frost, and next day we got no

farther than Point Richardson. From thence we crossed over, on the 24th, to what had, from the Continent, appeared like two islands, but which we rightly conjectured to form part of the southern shore of Boothia, or to speak with greater precision, of that land on which stands Cape Felix, of Captain James Ross. This shore we had the satisfaction of tracing for about sixty miles, till it turned up to the north, in lat. 68. 41. 16. N., long. 95. 22. W., only 57 miles from Ross's Pillar, the dip of the needle was 89. 28. 45. N., the magnetic pole bearing N. N. E., distant ninety miles. The variation, as shown by both the azimuth compass and the horizontal bar needle, was 45 degrees east. The objects seen on this coast are easily enumerated. A low, uninteresting, limestone tract, abounding nevertheless in reindeer, musk-oxen, and old native encampments. To the westward a good deal of ice appeared, and vast numbers of snow-geese passed high overhead, in long triangular flights, bound for milder skies.

Whilst engaged in taking observations, our men constructed another durable memorial of our discoveries, which was saluted in the usual manner. Then recrossing the strait on the 25th, we resumed for some time our outward route, only keeping more along the seaward verge of the islands, so as to shape a straighter course.

The weather, from being threatening and unsettled, soon became unequivocally severe. On the 29th Aug. a severe snow storm began, that lasted for seven days, during four of which we were fixed to a single spot by the violence of the northwest gales, while the frost was so keen that the pools among the rocks on which we lay became solid enough to bear up a man. A more moderate interval succeeded this fierce outbreak. Quitting the Continent again at the large river already mentioned, we struck N. N. W. for an extensive island, 22 miles off, which we coasted (N. W.) for twenty miles; and shortly before sunset on the 6th of September, stood out from thence due north, for the nearest point of Victoria land, which proved equally distant.

We have never seen anything more brilliant than the phosphoric gleaming of the waves, when darkness set in. The boats seemed to cleave a flood of molten silver, and the spray dashed from their bows, before the fresh breeze fell back, like showers of diamonds, into the deep. It was a cold night, and when we at last made the land, cliffs, faced with eternal ice, obliged us to run on for a couple of leagues before we could take the shore with safety. The coast of Victoria land, which we explored for upwards of one hundred and fifty miles, is incomparably the boldest we have met with in these seas. Often near the shore no bottom could be found with thirty-five fathoms of line, and the Cornelian blue color of the water everywhere indicated its profound depth. There are several noble bays, the largest of which northwest of Cape Alexander, is twenty miles wide, and equally deep, backed by snow-clad mountains. It attains to 69 deg. 40 min. north, the highest latitude of this voyage. At length we reached the extreme point seen by Mr. Simpson from Cape Franklin in 1838, where the coast of this large country begins again to bend northward of west, Cape Barrow being, by computation S. S. W., distant fifty miles. On the 10th of



# of Recent Discoveries IN THE ARCTIC REGIONS

*Drawn and Engraved for the Monthly Chronicle,  
June 1849.*

time, 18:10.

Scale of Miles



September we crossed this magnificent strait, with a strong E. S. E. or side wind, and a rough sea, in which our gallant boats, old and worn out as they were, acquitted themselves beyond our most sanguine hopes.

Our return from Cape Barrow was miserably retarded by furious northwest winds and severe stress of weather. Winter *permanently* set in on the 15th of September, and next day, to the undisguised joy of the whole party, we re-entered the Coppermine River, after by far the longest voyage ever performed in boats on the Polar Sea. Leaving one of our little craft, together with the remains of the pemican, (which through age and long exposure was become quite mouldy,) and various other articles, as a prize to the first Esquimaux who may visit the Bloody Fall, we ascended the river with our double crew in four days, abandoned our tents, and everything but absolute necessities; crossed the barren ground, up to the knees in snow, having unluckily left our snow-shoes on the coast, and safely reached Ft. Confidence at dusk on the 24th. The fisheries had failed worse than ever, and we had good reason to congratulate ourselves on not being doomed to pass a third winter within the arctic circle.

After settling with the Indians, liberally rewarding the most deserving, and supplying all with ammunition gratuitously, we took our departure on the evening of the 26th, to go into inland batteaux—one belonging to the expedition, the other came from Fort Simpson, sixteen days before our arrival. Our passage of Great Bear Lake was most boisterous and inclement. In crossing the body of the lake and other considerable traverses, our boats, with everything in them, and even the very clothes on our backs, became converted into shapeless masses and concretions of ice. It was high time for us to escape from Great Bear Lake, for the temperature, which was at four degrees below zero when we landed at the head of the river, on the evening of the 4th October, fell ten degrees below it in the course of the night; and next day we descended the rapid stream in the very midst of the driving ice. On entering the Mackenzie we experienced a temporary mitigation of this excessive cold; but we should most assuredly have stuck fast above Fort Norman, had not the northern gales again arose in their strength, and while they shattered and dispersed the rapidly forming ice, enabled us to stem the current under close reefed sails. At noon, on the 14th of October, after forcing our way with no small risk through the torrent of ice poured out by the river of the mountains, we reached this place and were cordially welcomed by our valuable friend, Chief Trader M'Pherson, who had for some time given up all hopes of our arrival.

Most of our people are still afflicted with acute pains and swellings in the limbs, caused by the cold and exposure; and are assured by Mr. M'Pherson that he has never known or heard of so early and rigorous a commencement of winter in Mackenzie's River. On the other hand, so fine a spring as 1839 seldom visits these frozen regions; and to this favouring circumstance under Providence, ought our signal success to be partially ascribed.

Oct. 30.—The state of the ice at length enables us to despatch carriers to Great Slave Lake. In the meantime, Governor Simpson's

highly valued letter of 17th June, which unfortunately missed us on our way hither, has cast up overland.

We rejoice in having anticipated the Russian expedition, and secured to our country and the Company the indisputable honor of discovering the North West Passage, which has been an object of search to all maritime nations for three centuries.

When our expedition was planned at Norway House in 1836, it was confidently expected that Sir George Back would have achieved the survey of the Gulf of Boothia with the *Terror's* boats, and that our meeting at the mouth of Great Fish River would have left no blank in the geography of Northern America. That officer's failure, the exhaustion of our men and means, and the necessity of a new wintering ground, render a fresh expedition indispensable for the examination of the Gulf of Boothia, the circuit of which, to the strait of the Fury and Hecla, according to the Esquimaux accounts, cannot be less than 400 or 500 miles.

It only remains to us to recommend to your Honour's approbation the plan proposed by Mr. Simpson to perfect this interesting service, which, as he has no wish to avail himself of the leave of absence granted by Governor Simpson, he is prepared to follow up, whenever the limited means required are placed at his disposal.

We have the honor to be,

Honourable Sirs,

Your most obedient humble servants,

PETER W. DEASE.

THOMAS SIMPSON.

---

## MISCELLANY.

---

### THE WINGS OF ICARUS,

*Or, the Provincial in Paris.*

[Continued from page 89.]

#### CHAP. IV.

"On my word, sir, I am happy to find you here," said the short, fat man, speaking in a loud tone, "ten walks for nothing you have obliged me to take, and to-day your good woman wanted to shut the door in my face."

"She was very wrong, Mr. Bigar," replied Blondel, without appearing to be shocked at the tone of the person, addressing him, "I am always at home to a gentleman like yourself, but I have been into the country, and this is the reason you have not seen me when you have called."

"Country," grumbled Mr. Bigar, between his teeth, "folks are always in the country when people come to ask for money."

"May I ask to what I am indebted for the pleasure of seeing you?" asked the master of the house with the most imperturbable politeness.

The short man drew from his waistcoat pocket a paper doubled square.

"Here, sir," said he, laying an emphasis on every syllable, "here is a note of eighteen hundred and thirty francs, for silver ware furnished you by me, and which was to be paid for, as you know, in a fortnight. It is five months since the fortnight has passed."

"If the fortnight has passed, the year has not; when did you know a gentleman who paid his bills at the day? Deuce take it, my dear sir, I am not a usurer to be counting out my eighteen hundred francs, at a moment's warning."

"Eighteen hundred and thirty francs, if you please, there is not a cent to be abated."

"Well, well, I shall not dispute about the total, provided you are reasonable."

"That is, provided you do not pay me; thank you," said the silversmith, who sat himself down on a chair, "I declare to you, sir, that I will not leave this place without my money. It is the end of the month, I have payments to make, and I am not in the habit of breaking my engagements."

"Do not get into a passion," replied Gustavus, lowering his voice in proportion as the creditor raised his, "there is a person in the next room, who may hear you."

"What do I care for that?" said Mr. Bigar, with a sharpened tone, "I have a right to what I ask, and before the whole universe I would say, I must have my money."

"Speak lower, I pray you, this person of whom I speak to you, is immensely rich, and his purse is at my disposal, but the scene you are getting up will undoubtedly prejudice him against me. If you wish to be paid, grant me three days; I do not ask a fortnight of you this time, but only three days."

"Not three hours," replied the jeweller; "in three days you will be in the country again. I know these colors."

Blondel invoked patience, that virtue which debtors often stand in need of, but creditors still more often.

"Let us talk reason instead of getting into a passion; you see it will not be quite the thing for me to borrow nearly two thousand francs, of the person in question, at the first moment of meeting; delay is indispensable; if you refuse me, what will happen? Instead of being paid in three days, you will not get paid at all."

"In that case I will have you put in Saint Pelagie," replied Bigar, exasperated at this declaration.

"You are mistaken," observed the debtor, in a calm tone; "a man is not put in Saint Pelagie for a little delay in the payment of a bill. I believe I did not sign a bill of exchange in your favors."

"If I cannot make use of constraint upon your body I can have recourse to seizing your furniture, which in fact is very fine, and I swear to you that I will not fail to do it."

"This is another error of which I will disabuse you;" replied the young man gently, "not a single article of this furniture belongs to me."



It is all, without a single exception, the property of my upholsterer, in the name of whom, by an arrangement between us, this apartment is hired. You have then no more right to seize my furniture than if I lodged in a furnished hotel."

At this unexpected declaration M. Bigar remained for some time plunged in silent consternation.

"These devils of upholsterers have more wit than we have," said he at last, in a dolorous tone. "But admitting that this furniture remains as pledge in the hands of him who has delivered it to you, I have certainly the same right on the silver which I sold you. If you cannot pay me, give back this silver to me, to settle the matter then, for now I know whom I have to deal with. I consent," continued the merchant with a sigh, "I consent to suffer the injury of five months' wear, and now it will be worth nothing more than old silver. Ah! well, I must bear this loss, this will teach me better another time."

"This is, to be sure, a much more reasonable proposition than the one you made me just now; and I am sorry I am not able to accept it."

"How is this?" said the silver smith, with redoubled uneasiness.

"Since I have begun my confession, I may as well finish it," replied Blondel, with a calm and resolute tone. "I must own to you then that it is impossible for me to do what you wish, for the reason that my silver, or, if you like it better, your silver, is at the house of my aunt."

"House of my aunt!" cried M. Bigar, raising himself in a rage.

"This distresses you; it gives me pain also, I assure you, but it is one of those little misfortunes which happen to the most honest persons, and that we must learn to bear. I repeat to you, then, it is to the pawn-broker that you must henceforward address your claims; all that I can do for you is to give you the bill."

"It is impossible," said the silversmith, trying to doubt his misfortune; "if such rascality were true you would deny, instead of confessing it."

Blondel was resolved to employ extreme measures to render tractable the creditor who had failed to be affected by his diplomatic artifices. By a prompt and decided gesture, he placed before the eyes of the silver-smith the iron fork, which he had kept in his hand through the whole of this conversation.

"Do you think," said he, "that a man having a single piece of silver at his disposition would resign himself to eating, with the help of such an utensil as this?"

As he perceived this incontrovertible witness of a disaster which he had refused to believe, M. Bigar turned red, and then became pale; finally a terrible greenish hue spread over his large face, from which his eyes seemed ready to start.

"My silver," said he, suddenly with a voice almost stifled by rage, "my silver immediately, or I will break every thing, glasses, clock, china, every thing, every thing!"

To deprive a man of hope is the way to exasperate, instead of softening him. The furious pantomime with which the last words of the silversmith were accompanied, convinced his debtor of this truth. He

could not help feeling, in consequence of this conviction, an inquietude nearly approaching to fear. In case of an actual collision, all the chances were against himself, for without speaking of the anger which increased his strength tenfold, M. Bigar was, though short, well built and athletic. Besides, conqueror or conquered, Blondel was not certain of being able to meet the expense of a contest in which his furniture was so severely threatened. This reflection brought him suddenly back to a change of tactics.

"Your silver I do not refuse to you ; and you shall shortly have it," said he, with a persuasive tone of voice ; "promise me only to be calm, and wait for me here. I am going to speak to my friend ; in five minutes I will be with you."

"I await you," said M. Bigar, reseating himself with a threatening air, and casting his eyes round to see where, in case of non-payment, the ravage he was meditating would be most efficacious.

Temporising was impossible. Yielding to necessity, Blondel entered the chamber, where, during this discussion, the substitute had been peaceably commencing his breakfast.

"This gentleman has rather a high tone," said he, without interrupting himself. "Have you got rid of him."

"I am very much embarrassed, on the contrary," answered the master of the house, with a disturbed air.

"Why ?"

"It is one of the associates of Louis Reynard, you see, the famous banker ; he has just come here upon the business that I mentioned to you, I believe, in my last letter, and which is now taking a most favorable turn. I was to make a little advance of money to-day, but the cash on which I depended has not come in, and I have not in my desk the sum which is necessary."

"And what sum do you want ?" said Deslandes, filling his glass.

"Two thousand francs. My assessments are within a fraction of two thousand francs."

The magistrate emptied his glass with a certain air of dignity. He then opened his pocket-book, detached two bank bills from the bundle which contained them, and presented them to his host.

"Here is your affair," said he to him.

"I thank you," said Gustavus, with an unconcerned tone, "I will return it to you in a day or two."

Blondel had left the saloon, in a doleful manner, with his ears down ; he returned, his head up, with a bold countenance, and his lips curved into a proud smile. When he saw the bills which the young man held carelessly between his fingers, M. Bigar rose to render to money the honors which are due to it, and his ferocious countenance was illuminated with a smile that a classic poet would have compared to a rainbow after a shower.

"You have money," said he, with an amiable air. "I do not know as I have enough about me to give you the change."

The debtor stopped before the creditor, and looked steadily at him for a moment, with a fixed air, rubbing his forehead.

"M. Bigar," said he, with a grave tone, "before we settle our account, I have several observations to make to you. In the first place, I would say to you, that your manner of entering my house, and your keeping your hat on your head, is not at all proper; my parlor is not your shop, I will thank you to observe."

Notwithstanding the haughtiness of this address, and the incongruity of the word shop, as applied to what a merchant of the *rez de chaussée*, calls his establishment, the silver-smith took off his hat, and slipped slyly into the pocket of his coat, the handle of the door-bell, which in the heat of the discussion he had brandished several times like a whip.

"I beg your pardon," said he, "I have a little cold."

"That is no reason why you should break my bell," answered Gustavus, "this brutal manner has very little success with me—I thought you knew better, Mr. Bigar. You ought to know that such noisy claims are in very bad taste. One of two things must happen; either I can pay you, or I cannot pay you; if I can, noise is useless; if I cannot, it is still more so."

During this admonition the jeweller eyed the bank bills, the sight of which had made him support patiently a more bitter rebuke, than that to which he had made his debtor listen.

"You do not know what the end of a month is," said he, to justify himself.

"I am going to prove to you that I know it very well," interrupted Blondel with great sang froid. "You see these bank bills; very well, they are not for you."

"Not for me!" cried Mr. Bigar, changing countenance.

"Here is the state of the case, my dear sir. I wished only to show you that it depends on me to pay you, and that if I do not do it now, it is for some other reason than the want of money. The case is this; to-day is the 27th of March; I have a note to pay on the 31st. It is a sacred thing, as you have remarked, and in such matters I am as scrupulous as yourself. Though I am not a merchant, I like regularity in business. You take, then, the second chance. I have money coming in the 5th of April. The 6th you shall be paid. Will this suit you?"

"This money is not yours, it has just been lent to you," said Mr. Bigar, stunned at the turn the discussion was taking.

"I beg you to believe that these bills came out of my desk," replied Blondel. "The person who is in the chamber behind, is a woman and not a man—I do not receive money of women."

"But if all your furniture belongs to your upholsterer"—

"I have amused myself a little at your expense, my dear sir; perhaps your boldness gave me a right to do so."

"And this silver which is in pawn—you will own that this is not very encouraging"—

"Another fiction that I amused you with. Your silver is at this moment in the hands of one of your fellow tradesmen, at which establishment they engrave a little better than at yours, and to whom I shall be obliged to give my custom if you are not more obliging."

In great cities, commercial industry often submits, from a desire of gain, to chances of which it becomes the victim without growing wiser. It is the nature of the Paris merchant to give credit on the smallest appearance of solvability, and to regard as a disaster every diminution of his customers. The bank bills of which he had obtained sight, had almost entirely re-assured Mr. Bigar; the perspective of an order lost to himself and gained by one of his rivals, gave him a sensation of mortification as severe as his uneasiness had been. The self love and cupidity of the merchant silenced the fears of the creditor.

"It is true, sir," said he, "that in my establishment the engraving has not always been as perfect as I have wished to have it, but at this moment, I have the best workman in Paris, and I do not fear any comparison. I am really sorry at what you have been telling me, sir. I am not in the habit of having persons who have honored me with their confidence, give me up."

"I shall not give you up, unless you compel me to do it," replied Gustavus with coldness.—"I wish to complete my service of plate.—Beside the separate pieces, of which I shall make a list, I shall want an Epergne for a table of twenty covers."

"I have what you want," replied the silversmith with animation,—  
"plated, extra superfine, more beautiful than silver."

"I do not want plate upon my table," said Blondel, with a scornful smile—"with your leave, I prefer silver."

"And you have the best reason to do so. At the end of six months plate reddens, and then your set is spoiled. Silver is the only thing—I have what you want, sir."

"I fear not, for I want something which is not yet in the market,—I want a work of art and not apprentice work. Chenavard will make me the design—he has promised to do it, and Barye has promised me three groups of animals for the middle and the two ends."

"The deuce!" said Mr. Bigar, opening his eyes in amazement.—  
"Designs from Chenavard, and groups from Barye! this is something to make an Epergne from, that will not be to be scorned."

"And which will do honor to the maker."

"This would be a pretty thing to send to the Exhibition of Industry."

"A good advertisement for your establishment, would it not be? Well, if you will hear to reason to-day, I in my turn will not disappoint you—I will let you try upon the Epergne, by way of requital."

Mr. Bigar stood some time plunged in silent perplexity.

"It is this cursed end of the month," said he, finally rubbing his ear.

"Say no more about it," said Blondel, in a dry tone, "since you are so pressed, I will not expose you to have a bill protested. Between ourselves, I thought your credit was safe from the chances of the end of the month. Give me one hundred and seventy francs, if you please."

With a proud gesture he offered the two bills to the merchant, whose self love, wounded to the quick, revolted, as the acute debtor had foreseen he would.



"I have a bill protested!" cried Mr. Bigar, with an accent of indignation. "You take me for some other man, sir."

"I take you for a man who wants money. Did you not tell me you did? Since you are under embarrassments, I am making a point to pay you; there is your money—you need not trouble yourself about the Épergne."

These last words had a magic effect. The silversmith who had reached out his hand toward the bills, drew it back as if the silken paper had possessed the property of the torpedo.

"I am not in such strait as all that," said he, "since you promise to settle our little account the sixth of April, I will wait until then."

"As you please," replied Blondel, with affected indifference. "I shall immediately see Chenavard and Barye, and we can make definitive arrangements about the Épergne. It will be a specimen of art, and I think since I give you the preference, you will treat me honorably. You know, beside, that I shall not dispute about the price."

"I dare hope that you will be satisfied," replied the silversmith, declining his steps toward the door, toward which his debtor was insensibly leading him.

"Here is the thing agreed upon," said Blondel, accompanying the merchant even to the anti-chamber,—“the 6th of April, at 11 o'clock in the morning, you shall have your money.”

Mr. Bigar, who had entered the house of his debtor with inexorable intentions, his head covered and with a crabbed countenance, retired from it with a benignant air, and had reached the middle of the staircase before he had taken the liberty to replace his hat on his head.

Left alone in the saloon, Blondel examined the bills of which he had remained definitively the possessor, with a look which might have flattered the pride of his lady love.

"Yes, certainly, there is a Providence," said he, after some moments spent in this ardent contemplation, "what folly it would have been if I had shot myself this morning."

To appreciate the real value of such an exclamation, it is necessary to raise a corner of the veil in which the life of his correspondent still remained enveloped in the eyes of the substitute.

In the midst of the general breaking up of classes of society, in Paris, there is found, in a certain world open like an inn to all comers, a great number of individuals whose existence baffles observation, and offers an insolvable problem to any one who is not accustomed to sound boldly the most muddy mysteries of cotemporary manners. Come from one knows not where, arrived one knows not how, without any family that they own, without any rank that they dare to own, free from all the duties that the life of an elector imposes, uninterested in the conversion of rents, possessing no more land than is contained in the flower pots in their parlors, these Parias live like Pachas. A wonderful but common thing! like the lilies spoken of in Scripture, they sow not, neither do they spin, and yet their luxury often defies the magnificence of princes; always on horseback, in a carriage, at table, at cards or at the theatre, they never show themselves except in a position which calls

for expense to be borne only by the affluent. Follow up these streams by the insolent murmur, by the floods spangled with gold like the Pactolus, and you will infallibly arrive at some muddy source. Formerly these equivocal existences were made picturesque, but the democratic spirit has passed its level over a denomination too much tinctured with feudality. The ancient *chevalier d'industrie* is reduced to-day to the modest name of *industriel*. The man has remained, but his title has disappeared in the revolutionary inundations. Who will dare to say that there is in France any longer a nobility, when vice itself has no longer its parchments?

An enemy to labor, and born for intrigue, Blondel de Gustan, instead of adopting some profession, ranged himself among the transcendent *industriels*, to whom Parisian society affords a vast and fruitful field. On this territory, flowery to be sure, but having its frequent quagmires, he had been walking for more than a year, sometimes reposing on a bed of roses, sometimes deep in the mud, to-day drinking Tokay wine in bumpers, to-morrow reduced to the water of the Seine, loading his pistols at each new catastrophe, and throwing the balls out of the window as soon as the smallest piece of gold found its way into his purse, submitting, in a word, to the most various caprices of fortune. At this present time, the source of his mysterious and ephemeral opulence had suddenly dried up, from a reason which we shall explain hereafter, and Blondel, harassed by debt, without money, without credit, and nearly without bread, had begun, for the tenth time, a soliloquy upon suicide, less poetical perhaps, but better founded than that of Hamlet.

"To die of hunger, or to blow my brains out, this is the question," had he said to himself, as he gazed upon the well of misery into which he had fallen, and from which he saw no issue.

Without dispute, Deslandes became the helping rope after which the Parisian in the abyss was sighing. The latter clung with hand and foot to the means of salvation which fortune had so opportunely sent him. The attachment of the two friends, placed by Fontaine at Monomatapa would have appeared pale and cold, by the side of the marks of affection lavished by Blondel upon his old comrade, whose portfolio was so well furnished.

"My present arrangements are so contracted," said he, "that I cannot offer you a bed, and I am sadly vexed that you should have arrived before I am installed in my new apartments, where I shall be able to receive you, but at least we must see each other every day, and we must dine together."

"Not to day," said the substitute, "I have an important visit to make, and I think I shall be detained to dinner."

"To-morrow then, but I shall see you before that time.—What shall you do this evening?"

"I depend on going to the Opera—does Duprez play?"

"Yes, in William Tell."

"Shall you go, too?"

"Parbleu, there is no Opera if I am not there," said Blondel, whose gaiety had been entirely restored by the two bank bills. "After that

we will meet in the green-room, and I will carry you to a house where you will get some idea of Paris society."

"Agreed—this evening then," replied the substitute, who, after having taken leave of his equivocal friend, entered a carriage and directed it to the Rue de la Planche where resided Madame Piard.

---

INVENTIONS AND DISCOVERIES.

London, May 14, 1840.

**ARCHIMEDEAN STEAM SCREW.**—The gentlemen interested in this great and novel principle in steam navigation invited their friends to accompany them yesterday from Blackwall to Gravesend on board of their beautiful vessel the *Archimedes*, in order that they might have an opportunity of witnessing the success of Mr. Smith's invention.

James Mackillop, Esq., J. D. Powles, Esq., John Loch, Esq., Mathew Forster, Esq., Henry Robinson, Esq., Mr. Forbes (one of the sons of Sir Charles Forbes, Bart.) Messrs. Galloway and Perkins, the eminent engineers, and about twenty other individuals of high standing in the scientific and commercial world, including some naval officers of distinction, and foreigners, were of the party. The weather in the early part of the morning, was unfavorable for the excursion; but soon after mid-day the clouds dispersed, and the atmosphere became as bright and pleasant as could be desired. The commander of the *Archimedes*, after making a little display of her capabilities off the Brunswick Wharf, received his company on board, and at once started in the finest style conceivable towards Gravesend, but with the tide and wind against him. From the position of the propeller, of which a description has already been given in *The Sun*, it may be supposed that the vessel causes but little swell. The fact is she causes no more than a sailing vessel would do going at the same speed, the only trifling disturbance of the water being at the bow. The action of the steamer was throughout most perfect, and called forth expressions of admiration from every one on board. The advantage she possesses over the ordinary vessels of the same class, the paddle-wheels of which from their situation never acquire the necessary resistance, and one or the other of which, in an agitated sea, is constantly out of the water altogether, needs no illustration. The screw at the stern, being ever under water, throws not away its labors, nor is it exposed to external injury, like the great unsightly paddle-wheels of the common steam-vessel—a circumstance which, combined with other important considerations, leads to the conclusion that it must completely supersede them. In a naval action the screw is not by any possibility to be got at by the enemy, whereas the old-fashioned exposed paddle might be knocked to atoms the very first shot. Again, assuming that any accident occurred to the machinery, a steamer like the *Archimedes*, propelled by Mr. Smith's patent screw, may, in two minutes, be converted into as pretty a sailer as ever walked the waters. In the course of the short trip the steam

was taken off, and canvass hoisted; and the wind being, for a short interval, in her favor, the *Archimedes* ran up the river at the rate of from six to seven knots an hour.

An example was also given of the facility with which the vessel puts about. No play whatever was required for the purpose. The movement was effected, as it were, upon a pivot. Two eminent Parsee ship-builders were among the guests, and they seemed to take a deep interest in all that passed.

The *Archimedes* went a few miles beyond sea reach, and, after passing a most agreeable day, and enjoying the hospitalities of the captain on board, the company were landed at Blackwall at an early hour in the evening.

---

**THE PATENT GAS EXPERIMENTS.**—Yesterday, a series of trials to test the powers of this new agent of combustion, were made in some offices at the workhouse in Mount street, Berkley square. The experiments were made in presence of his Royal Highness the Duke of Cambridge, the Marquis of Douro, Lord Robert Grosvenor, Lord Charles Fitzroy, Hon. Colonel Lowther, Major-General Alexander, Alderman Sir M. Wood, M. P., Doctor Marshall Hall, Bryan Donkin, Esq., Major Robe, R. E., Sir R. Cayley, Captain Taylor, Mr. Sheriff Wheelton, Sir F. Trench, M. P., Captain Forbes, Robert Perritts, Esq., R. E., Messrs. Maugham, Taylor, and Stacey, and — Morley, &c.

The apparatus for preparing this new gas was temporarily fitted up for this occasion, and the manner in which the gas is generated was explained in a very satisfactory manner to his royal highness and the company, by the Count de Villemasin, who speaks only in the French language. He pointed out the particular construction of the furnace and its arrangements, in the following manner, as nearly as we could collect the facts:—

There are three cylindrical retorts placed vertically side by side, and enclosed in a furnace of suitable dimensions, to heat them up to what is technically called a red white heat. This is obtained in a short time, with but a trifling cost for fuel. The requisite heat having been obtained, water is allowed to drop rapidly, but not to stream, into the first retort; and tar into the third one. We must here observe, that the three retorts are charged with coke broken into pieces about the size of a walnut. In the first retort the water is decomposed, the hydrogen is separated from the oxygen, which, uniting with a certain portion of carbonised vapour, produces carbonic acid gas. This product, with the liberated hydrogen, now passes into the second retort, and it is in this retort that the carbonic acid gas is changed into oxide of carbon by passing through the heated interstices of the coke. The liberated hydrogen, with the other products, unite in the third retort with the superabundance of carbon which is produced by the decomposition of the tar, and thus is formed a pure carburetted hydrogen gas; not requiring any further purification.

The proportions of the water and tar to each other for producing the



purest and strongest gas are, three parts of the former to one part of the latter substance, consequently the materials being very cheap, the product cannot bear any great price.

This gas seems to be a very active and powerful agent, as it appeared in juxtaposition with the common gas, and when carefully prepared, the flame it produces is clearer and consequently more bright, than the same surface of the ordinary gas, and there are street lamps lighted from eight to nine o'clock in the evening in the street at the rear of the workhouse looking into Hill street, where the qualities of the two gasses can be accurately compared.

---

IMPROVEMENT IN PRINTING.—An improved printing press has been invented by Mr. Trench of New Jersey, for printing books from stereotype plates, on paper as it comes from the roll, in the paper mill, before it is cut into sheets. Both sides of the paper are printed at the same time, and for this purpose the stereotype plates are arranged on two large rollers, in such order that the pages may follow in proper succession, when the paper is cut into sheets of convenient dimensions, and folded. According to the dimensions of the rollers, will be the number of the pages which can be printed at one operation, extending to a moderate sized volume. We have seen a specimen of printing from this press, consisting of 168 pages, in which all the pages are printed consecutively upon the roll of paper at a single revolution of the two rollers which form a part of the press; and repeated copies of the work follow upon the same roll of paper to any desired extent. The inking of the plates is performed by machinery, and no attendance is required except for putting the machinery in motion, and to attach to it the roll of paper as it is delivered from the paper mill. The paper when printed, is dried and pressed as fast as it passes through the printing press, and is rolled up in a compact form, ready to be carried to the binder. The impression is good, the distribution of ink even, and the execution of the work in every respect equal to that of ordinary stereotype printing, executed in the common mode, on the best power presses. The ordinary movement of the press is such as to print a wide sheet at the rate of about ten yards in length in a minute, and the movement is continued without any other interruption than that which is necessary for removing the rolls of printed paper, and substituting new rolls of prepared paper as fast as they are required for supplying the press. This Press is in operation at the paper mill of Mr. Vail in Morristown in New Jersey.

---

TANNING. A discovery has been made which seems likely to revolutionize the trade. By means of a tanning machine or pair of horizontal rollers fixed over a tanpit, between which is introduced a belt or band of hides attached by ligatures to each other, to the number of 50 to 100, and by which the rollers are constantly fed or supplied, the hides are lifted out of the pit on one side of the machine; as they pass between the rollers, the exhausted ooze or tanning liquor is pressed out of them, and they are deposited in folds in the pit, on the other side of the machine, where they absorb another supply of fresh

ooze. The first hide having been inserted between the rollers, the others follow in succession, and upon arriving at the end of the band the motion of the roller is reversed, and the belt is returned through the machine to receive another squeeze. This alternating motion is constantly repeated, the pit being replenished from time to time with fresh solutions of tan, till the operation is completed. The effects said to be produced by this plan, are—1st. The shortening the time of tanning to one fourth of that generally required. 2d. The production of a considerable increase of weight. 3d. The leather tanned by this method resists water longer than that tanned by the old process. 4th. The new method is cheaper to work on than the old. 5th. That it is applicable to the existing tan yards, at a comparatively trifling expense, with a capability of working in rounds or series, and of expending tan and liquor. 6th. That it is available for all sorts of leather.

---

**A NEW SPECIES OF GAS LIGHT.** A paper has been read in the French Academie des Sciences on a gas discovered by M. Jules Segum, which is perfectly free from any hydro sulphurous element, and also from all carburet of sulphur, and it is stated to be admirably adapted for the purpose of giving light. It is made of materials which are not only useless, but noxious, as dead horses, old leather, spoiled wool, &c., and is at the same time free from any offensive odor. One old horse will, it is computed, afford on an average 25.000 litres (about 1.525.701 cubic inches) of gas, besides sal ammoniac and animal black, and 22 litres per hour, will keep a single jet burning. The invention seems to be regarded in France with a favorable eye, as leading alike to economy, and the removal of a nuisance.

---

**VOYAGE OF EXPERIMENT AND DISCOVERY.** Highly gratifying accounts have been received of the expedition under the command of Captain James Clerk Ross, which has been sent out for the purpose of carrying on a series of experiments in magnetism. The two vessels, the Erebus and Terror, which compose it, arrived at St. Helena on the 2nd February, and established their first magnetic observatory at New Longwood house, under the charge of Lieut. Lefroy, on the 8th. On their voyage out they made a series of experiments, and among them that of sounding in places far from land, and succeeded in striking bottom, in 14 deg. S., and 27 deg. W., at the depth of 2.425 fathoms. In hauling the line in again, it broke, which was to be expected from the immense depth: the last hundred fathoms were 15 min. running out. They were at Puerto Prayo, one of the Verde Islands, on the 13th Nov., and remained there until the 20th, to examine and compare all the working magnetic instruments. The heat was excessive, standing 80 deg. day and night. The barometer steady at 30.000. On the 1st of Dec., they made the Rocks of St. Paul's, lat. 0 deg. 56 min. N. 29 deg. 20 min. W.; ascertained the dip, variation, and intensity; crossed the Equator on the 4th, and proceeded southward by the line of least intensity, beating tack and tack, in the heart of the S. E. trade wind, to St. Helena, from which place they sailed on the

9th Feb. to Tristan d'Acunha, in 37 deg. S. and 12 deg. W., there to compare instruments, thence on to the Cape, where they would establish another observatory, and then proceed as far south as possible, passing the cold months either in the New Hebrides, or in the ice. From St. Helena, Capt. Ross proceeds to the Cape of Good Hope, to establish Lieutenant Eardley Wilmot, R. A. and his party, in a similar observatory to that established at Longwood, where corresponding observations are to be made during the three years in which the expedition will remain in the southern hemisphere. We understand that, by adopting proper precautions, the officers succeeded in making magnetic observations at sea; with as much precision as on land, the two ships sometimes telegraphing to each other the same minute of dip. The importance of this success towards the prosecution of the objects of the voyage will be estimated, when it is considered how large a portion of the southern hemisphere is covered by the sea. Captain Ross obtained soundings in the middle of the Atlantic Ocean, and far distant from any land, with a line of 2,500 fathoms, being, we believe, by far the greatest depth that has ever been reached by a sounding line. [London Journal.]

---

**CURE OF DEAFNESS.** Two London Journals of the first respectability, attest the correctness of the following statement of extraordinary cures performed in London. One of them expresses the opinion that the government ought to step forward and purchase the discovery for the general relief of mankind.

"Dr. Turnbull's mode of restoring or developing the senses of hearing and sight, is undoubtedly the most wonderful discovery of the age. On more than one occasion we have laid before the public, accounts of the miraculous cures of which we have actually witnessed the performance, and which, we hesitate not to confess, had we not seen we could scarcely have believed. However, as too much publicity cannot be given to a discovery calculated to confer upon many human beings blessings scarcely inferior to existence itself, blessings without which life lacks its chief value, a discovery by which those excluded by the absence of sight or hearing from the most desirable intimacy and communion with the external world, are admitted to enjoyments previously unknown to them, to receive the light of Heaven with all its delighting revelations, and hold free converse with their kind—as too much publicity cannot be given to such a discovery as this, we unhesitatingly lay before the public the wondrous facts which we witnessed on last Wednesday. Two patients, recommended to Dr. Turnbull's care by the Rev. Dr. M'Kinley, of Kilmarnock—one named Margaret Shields, aged nine years, whose parents thought she had lost her hearing when an infant by fever—the other named Mary Wilson, aged thirteen years, of Templeton Burn, Kilmarnock, whose parents say she was born deaf and dumb—were introduced into the room where we attended to witness Dr. Turnbull's operations. Into the ears of each of these children the operator poured a few drops of white liquid and added a small bit of lint to prevent its escape. They were then allowed

to sit quietly for about half an hour, when the Doctor slowly and silently approached first the one and then the other, with his watch in his hand; and in both cases, no sooner did he come within two or three yards of the patient than her eye indicated a feeling of surprise, and a moment after, as the ticking of the watch became more distinctly heard, she uttered an exclamation of delight and assumed an attitude of most anxious attention, apparently desirous thoroughly to enjoy the new sensation. Some simple sounds were next uttered by the Doctor's assistant, and were immediately repeated by the child upon whom the experiment was tried. Words were next spoken in a similar manner, with a similar result, and even whole sentences, after being pronounced by Dr. Turnbull's assistant, were repeated by the patient, who, only half an hour before, was both deaf and dumb. The child, of course, evinced no consciousness of the meaning of the words, but seemed to utter them from the delight of exercising a new faculty. Such a wonderful result astounded us. As language would altogether fail to convey an adequate idea of the emotions we experienced, we state the simple fact, which, indeed, needs not any extraneous embellishments to heighten its interest.

"We have given the name and address of the Rev. gentleman who recommended the children, in order that the sceptical may have an opportunity of ascertaining their condition previous to the operation we have just described."

---

**CAST IRON RAILROAD.** The *Miner's Journal*, published in the iron and coal region of Pennsylvania, gives the following account of a successful experiment which has been made of cast iron in the construction of a rail-road. It is not the first experiment in the use of cast iron for rails, nor is it likely that this material will supersede the use of wrought iron for this purpose, except in the vicinity of furnaces where this material can be furnished at a cheap rate, and in the absence of the means for procuring the other. It has not yet been found practicable to make wrought iron rails at nearly so cheap a rate, as that at which they can be imported from England. But it appears from this statement that the cost of the cast iron rail is something less than of the imported wrought iron at the current prices of the article in England.

"We have thus far delayed making any comments on the cast iron rail-road, laid on the Greenwood addition to the Mount Carbon Railroad, more than the mere mention of its completion. This was for the purpose of obtaining the estimates of its cost and other data, which we presumed would be of interest to our friends; these have been politely furnished us by Andrew Russell, Esq., agent for the Greenwood property, and by their aid we lay the following facts before the public:

"The length of the road from the Mount Carbon Road, to the Steam Mill, which has been relaid with cast iron rails, is 1200 feet, a double track; making 4800 lineal feet or 1600 yards of rail. In this distance there are nine full turnouts or crossing places, which require 486 lineal



feet or 162 yards of rail, exclusive of the plate. The Rail is called the *house joice pattern*, and is cast in lengths of six feet; the pattern was first made for 70 lbs. of iron to the yard of rail, but was altered by increasing the size and strength of the flanges to about 80 lbs. to the yard. The quantity of rails used in constructing the whole road, was about 62 tons, they are laid upon sills which are 3 feet apart from centre to centre, these being again supported on the graded road by square blocks of stone under the end of each sill, where the rail rests on it. The sills cost 42 cents each, and the cost of laying the road, including grading, of which but little was required, it being laid on the old track, was 80 cents per panel of 3 feet. Cost of putting in each turnout for labor and workmanship \$45.

"The road has now been in use some weeks, and heavy trains of loaded coal cars have passed over it, and it does not appear to give way in the least, nor has a single rail broken. It is believed by all to be strong enough for any road, where horse power alone is used. What effect the frost in the fall may have on it, is yet to be tested.

"Taking the foregoing data, as the basis of a calculation, a mile of Railroad, laid with these cast iron rails, will cost as follows:

1760 yds. 80 lbs. to a yard, is a fraction over 62 8-10	
tons, which for double track is 125 6-10 tons,	
costing say \$44 per ton,	\$5,400.80
1760 panels of 3 feet at 80 cents,	1,508.00
1760 sills at 42 cts.	739.20
3600 lbs. about, of bolts and spikes at 10 cts.	360.00
	<hr/>
	\$7,008.00
Contingencies,	92.00
	<hr/>
Cost per mile,	\$8,000.00

"These rails were cast by Mr. William Lyman, at his furnace on the Island; it was originally contemplated to make them at the blast furnace, but as that blew out shortly after the contract was made, Mr. L. erected a small cupola, for the purpose, and made them of Anthracite Iron of his own smelting."

**ELECTRO-MAGNETISM.** The late London Journals describe a modification of machinery for producing a moving power by electro-magnetism. It does not appear, from the description, very different from machines which have been exhibited in this country, for producing the same effect. It is in fact perhaps the same machinery which has been exhibited here. It is not improbable that some further advance may be made in the means of producing power from this source, but from the extremely limited reach of the magnetic attraction, there seems to be little reason to anticipate that by any combination of machinery, the power can be multiplied to such a degree as to be advantageously applied to any practical use, as a working power. The following is the description of the exhibition as given by one of the London Journals;

"We were invited on Tuesday last, [May 5th,] to a private view of an electro-magnetic machine, now exhibiting at the Colosseum, Regent's Park, and for which a patent has been taken by an American gentleman named Taylor. An inspection of this machine convinced us that the problem of the practical application of electro-magnetism to the production of an efficient motive force, is much nearer solution than we previously conceived. The apparatus consists of a wheel two and a half feet in diameter, on the circumference of which are set a number of pieces of soft iron (we believe seven), and of four stationary horse-shoe magnets, attached to the frame in which this wheel revolves: by means of a contact breaker concentrically fixed to the wheel, and formed of alternations of copper and ivory, these soft iron cores of the electro-magnets alternately acquire and lose their magnetism; while, in the former state, one of the pieces of soft iron on the wheel is attracted until it arrives opposite the magnet, when the latter, losing its magnetism by breach of battery contact, the former is carried on by momentum, and another arrives opposite the sphere of attraction just as the magnetism is again required, and so on in rotation. The dogs, which press by means of springs against the contact breaker, are irregularly placed, so as to have one of the four horse shoes always magnetised, and thus the force is continuous and uniform. By an ingenious contrivance, these dogs are capable of being shifted so as to stop or back the wheel. The motive power employed was one of Grove's batteries, containing a series of 5-4 inch square plates, and occupying a very small space. To the wheel was connected a lathe, in which articles were turned—wood, ivory, or iron—by an assistant; and with this drawback, it performed 150 revolutions in a minute. Considering the extreme infancy of the science of electro-magnetism, and the rapid strides it has made within the last few years, we can now, without doubt, hail as fast approaching the period when this power will be generally employed in the arts. Although, as contrasted with steam, it may be in its present state somewhat expensive, yet it admits of application to minor machinery, such as printing presses, turners' and cutlers' lathes, &c., to which steam power would be impracticable; and it has the great advantages of extreme simplicity of construction, ease of management, and absence of danger."

The following more remarkable performance of the electro-magnetic power, if the account is to be credited, is related in a German paper on the authority of the St. Petersburg Northern Bee. A short time since a party of sixty persons, consisting of literary and scientific gentlemen and friends of the arts, some of them filling high offices in the government, met at the country house of the head of the corps of engineers, P. G. Soholewski, at Petersburg-island, to witness a new experiment of the application of electro-magnetic power to navigation. A cutter, manned by twelve persons, carrying an electro-magnetic power estimated to be equal to  $\frac{3}{4}$  of a horse power, made its way, for several hours with a strong head wind, against the stream. The vessel was 24 feet long, and 8 feet broad, and set about 3 feet deep in the water. The electro-magnetic machine is not more than two feet in length, and the same in breadth.

## CHRONOLOGY.

May 6th. Lord William Russell, brother of the late Duke of Bedford, and uncle of Lord John Russell, aged 72, was found murdered in his bed, at his house in Norfolk street, at the westerly part of the city of London. He lived retired, with a Swiss Valet named Curvoisier, and two female servants. One of the females at 7 o'clock in the morning, observing appearances of the house having been robbed, the silver and other articles having been removed from their places—entered his chamber and found him dead in his bed, his throat being cut from ear to ear. The wound was sufficient to produce immediate death. On search being made, money and jewels were found concealed in various parts of the premises, and strong suspicions rested on the valet, as the perpetrator of the deed. He was accordingly arrested, and would probably take his trial for the murder.

May 6. The Legislature of Connecticut assembled at New Haven. Charles J. McCurdy Esq. of Lyme, the whig candidate, was chosen Speaker of the House of Representatives, by 107 votes. Mr. Jesse Olney had 54 votes, and there were 11 scattering. In the afternoon Gov. Ellsworth was escorted to the State House, and in presence of both Houses of the Legislature he took the oath of office, and subsequently delivered his speech, in which he gave a review of the public affairs of the state.

On the same day the Legislature of Rhode Island met at Newport. Henry Y. Cranston, Esq. was re-elected Speaker of the House of Assembly. The votes given at the general election were referred to a committee, who reported in the afternoon, and Samuel W. King was declared elected Governor, and formally proclaimed as such. Proclamation was also made of the election of the other officers, Lieut. Governor, Senators, Secretary, Attorney General, and Treasurer, who took their respective oaths of office. All the officers elected were of the Whig ticket, the majority of votes for governor being 1311, and for lieut. governor, 1333.

May 7th. A most violent and destructive Tornado visited the city of Natchez, in Mississippi. An approaching and violent storm was indicated for sometime by frequent lightning, and successive peals of thunder. At a few minutes before two

o'clock P. M. the storm burst with such violence upon the town that a great part of the houses were blown down or unroofed, and many of them swept away. Several steam boats and a great number of flat boats in the river were swept from their moorings and sunk. Many persons were crushed by falling buildings, a large number were rescued severely wounded, and many more were providentially and almost miraculously saved, amid falling ruins. About 50 dead bodies were taken from the ruins of fallen houses; and many more were severely wounded. It was computed that from two to three hundred persons were lost in the boats at the landing. The loss of property destroyed in the city was estimated at a million and a quarter of dollars. The citizens of New Orleans and other neighboring places, with a laudable spirit of philanthropy, on hearing of the disaster, despatched surgeons, workmen and pecuniary contributions, for the relief of the sufferers. It was the most destructive storm which has been known in our climate.

May 8. It is announced that Southampton is the port which has been finally fixed upon as the West India steam packet station. The Royal Steam-packet Company, with whom Government have contracted, have declared their capital to be £1,500,000 in 15,000 shares of £100 each. The contract is to carry the mails to and from the British Western Colonies for ten years at the annual cost of £240,000. The vessels to be employed are, by the direction of the Admiralty, to be of the most substantial and powerful description. The company is bound to have in readiness for next year 14 steam-ships of the following dimensions:—Length 240 feet; burthen 1300 tons; engines 400 horse power. These vessels will be on a similar scale of splendid equipment with the Great Western and British Queen, and will be amply furnished with every means of safety combined with comfort. Fourteen steamers are contracted for,—eight of them will start together from Southampton on their first voyage in the early part of next year.

May 10. *Opening of the London and Southampton Railway.* From an early hour yesterday morning the neighborhood of Vauxhall and the Nine Elms presented a bustling and animated appear-

ance, in consequence of the announcement that had been made, that the whole line between London and Southampton would be opened to the public on that day, and the streets were thronged with persons hastening to the Vauxhall terminus, to witness the departure of the first train. The various inns and public houses in the neighborhood displayed banners with the name and arms of the company, the union jack, &c., from the windows; and the principal entrance to the railway was also decorated in a similar manner. The steam-boats that ply between London-bridge and Vauxhall were crowded with persons, and afforded an abundant harvest to their proprietors. Shortly before eight several of the directors of the company arrived at the station, preceded by bands of music, and at eight o'clock precisely, the first train took its departure amidst the cheers of the bystanders. The up-train from Southampton started for London, at half-past six, and it was expected would have arrived at Vauxhall, a distance of seventy-seven miles, at half-past nine; but, in consequence of the bursting of a tube in the boiler when the train arrived at Worham Farm, a considerable time elapsed before the injury could be repaired, and caused a delay of an hour and a half. The next train which left Southampton at ten o'clock, however, performed the whole distance in two hours and fifty minutes, having entered the Nine Elms station at ten minutes before one. The passengers expressed themselves highly gratified with the general arrangements, and the ease and comfort with which the journey was performed. A variety of amusements are provided for visitors along the line; and Mr. Brassey, of Popham-green, the contractor for the eighteen miles of road from Basingstoke to Winchester, which was yesterday first opened, provided a very fine ox, which was roasted on his premises whole, and gave a treat to the workmen and their wives and families, in celebration of the event. Dinners and entertainments were also given at Southampton, to the managing directors resident there, and a most splendid display of fireworks, with emblematical devices, concluded the festivities of the day.

May 12. *Improvements in Paris.* The recent improvements in the Place de la Concorde have made it a favorite promenade in Paris, when the great heat of the sun, from which there is no shelter, does not prevent it from being visited.—

The two fountains, which are probably the most elegant in Europe, are completely finished, and are the admiration of foreigners as well as of Parisians.— They are in bronze, a great part of which is splendidly gilt, and have large allegorical figures intended to represent the large cities of France, and the supposititious deities who supply the fruits of the earth. Between the two fountains stands the Obelisk of Luxor, which has a better appearance now that it is less solitary, although there are few persons who are not of opinion that it is misplaced: for besides having nothing to recommend it to the eye except its antiquity, it intercepts the expansive and beautiful view in a direct line from the Tuileries to the Arch of Triumph at the end of the Champs Elysées. It is proposed to enclose the Champs Elysées on the side next the Tuileries as far as the Rond Point, and to build theatres, concert-rooms, public baths, exhibition rooms, cafés, &c., and to call the whole Le Petit Naples. All these buildings are, according to the designs of M. Hittorf, to be of the greatest magnificence, and some idea may be formed of their size and extent, from the fact that the number of gas-lights for the exterior rendered obligatory by the plans, would be more than 800. Two or three companies have tendered for the affair, but the Government propose to grant ground leases of only forty years, whereas it is contended that for buildings of such an expensive character at least sixty years ought to be granted. Some persons object to the proposed scheme on the ground of its taking from the Parisians a favorite promenade, but this an error. There will still be a great space between the buildings, which would be laid out in ornamental gardens and pleasure walks, and the remaining half of the Champs Elysées beyond the Rond Point would be untouched. Should the plan be carried into effect, as there is now good reason to think it will be, the entrance into Paris by the Champs Elysées will not only be the most magnificent avenue in the world, but it will almost realise the most brilliant descriptions of the "Arabian Night's Entertainments."

May 12th. The report of the commissioners on the project of a law extending the charter of the bank of France. It is stated in the report that the Bank has no wish whatever to free itself from its dependence on the Government, which was established by law of April 22, 1806, and



according to which it is managed by a governor, and two sub-governors appointed by the King, and 15 directors and three auditors nominated by the shareholders. Prior to this law the administrators of the Bank were nominated by the shareholders alone, and the present system was introduced by Government on the plea that the former one had given rise to abuses. By the law of 1806, the capital amounted to 90,000,000*f.*, and was represented by 90,000 shares of 1,000*f.* each. Part of the profits have been employed from 1808 to 1817 in buying in 22,100 shares, which have been since cancelled. Hence the present capital is 67,900,000*f.* represented by 67,900 shares.

This capital the commission considered sufficient, but at the same time are opposed to the principle of the shareholders varying the capital at pleasure. The capital they consider as a pledge which the Bank should always offer to contracting parties, and that to these the amount should always be exactly known. The capital and reserved fund, according to the report, are represented by the banking house, by 2,952,335*f.* in 5 per Cent. Rentes, by 59,046,700*f.* of nominal capital, and by 17,737,525*f.* 85*c.* in specie. The large quantity of capital and reserved fund vested in rentes did not escape the attention of the commission, who reflected that the very same circumstances which might force the Bank to an inconvenient taking up of its notes might also lead to a disadvantageous sale of rentes. They considered, however, that such a crisis could not come all of a sudden, but that the Bank might foresee it and take precautionary measures, and thought it would be hard to compel the Bank to keep in its coffers 77,000,000*f.* of specie (the sum to which the capital and reserve together ought to amount,) which would thus be withdrawn from circulation, and on which the Bank would receive no interest.

The majority of the commission were opposed to the issue of notes under 500*f.* (\$95.) considering that these would find their way into the hands of the less opulent part of the community, who would be the most susceptible of alarm, as to the security of their limited but hard earned property, and who would be likely to rush to the Bank for payment in the event of a panic. Hence the Bank would be forced to keep in its coffers a greater quantity of specie to meet these small notes, which would usurp the place and cause the exportation of much metallic currency.

With respect to the period to which

the charter should be renewed, the commission propose 1867, with a power to terminate or modify it at the end of 1855, by a law previous to that period.

May 12. In the French Chamber of Deputies, the Minister of the interior announced that the King had commanded the Prince de Joinville to proceed with his frigate to the island of St. Helena, to obtain the last mortal remains of the Emperor Napoleon, and to bring them to France. An application had been made to the British Government for its consent to this removal, and it had been cordially granted. The Prince is to be accompanied by Gens. Bertrand and Gourgaud, Count Las Cases, and Gen. Petit. The following project of a law was read, and was received with great satisfaction. It was passed with as little delay as the forms of the Chamber admitted.

"Art. 1. There is opened to the Minister of the Interior, upon the estimates of 1840, a credit of 1,000,000 *frs.* for the transportation of the mortal remains of the Emperor Napoleon to the Church of the Invalides, and for the erection of his tomb.

"Art. 2. The expenditure authorized by the present law shall be provided for by the resources granted by the law of finances of Aug. 10, 1839, for the estimates of 1840.

"Given at the Tuileries, May 12, 1840."

May 15th. The steamship *British Queen* arrived at New York after a passage from Portsmouth of fourteen days, and bringing London news to May 1st.

May 16. The packet ship *Poland*, Capt. Anthony, on her passage from New York to Havre, was struck by lightning, and burnt. She had sailed from New York on the 11th with 24 cabin passengers and 11 in the steerage; numbering with the captain and ship's company, 63 persons in all on board, men, women and children. Among the passengers were Mr. B. G. Wainwright of Boston, recently resident in Paris, his wife and two children, Mr. J. H. Buckingham of Boston, Miss Hughes, daughter of the American Minister at Stockholm, Mr. Arfwedson, of Stockholm, the American Consul at that place, his wife and two children, and others from various parts of the United States and Europe. The voyage began prosperously, and on the 16th near a third part of it was accomplished, when at three o'clock P. M. in long. 58, 30, during a heavy shower, a violent shock of lightning struck the ship, accompanied by a tremendous peal of thunder, it being the only one heard during the afternoon. It was immediate-

ly perceived that the ship had been struck, and although apprehensions were felt by the captain and others, that she had taken fire, it was not fully ascertained until eight o'clock in the evening, after the removal of part of the cargo, consisting of flour and cotton, that the cotton in the lower hold was on fire. The hatches were immediately closed and made as tight as possible. In the meantime so little apprehension had been entertained, that the children had been undressed and put to bed. Soon after the hatches were closed, a suffocating gas filled the cabin, and it was found necessary to remove the women and children immediately upon deck. A small part only of the baggage was removed with a small quantity of provisions. The women and children and part of the passengers and crew, 35 in all, with a few light articles of baggage, a small quantity of provisions, and a few jugs of water were placed in the long boat, which was attached by a line to the ship. The rest remained on board, retaining two small boats, which were insufficient to hold half of them. The night was passed in a state of the greatest anxiety, care being taken to stop the cracks as far as possible, lights being hoisted in the rigging, the ship being kept in the best state and directed toward the south-east in the hope of crossing the track of a ship which was passed the preceding day. Morning broke, and the sun rose, but no sail was in sight. What follows is from a narrative of Mr. Buckingham, one of the passengers on board.

"There we lay on the broad ocean, a fine ship smoking at every crack, with three frail boats attached to her by a single rope, and no hope of rescue except through the goodness of the Almighty. Whatever may have been the religious feelings, or the want thereof, among those sixty-three persons so awfully situated, there was no cowardice exhibited, no sudden outbreak of prayer and repentance, no murmuring. But there did appear to be a confidence in the breast of every one that the God who had thus suddenly afflicted us would not leave us to perish in that desert sea.

We remained in this state of suspense all day Sunday, making ourselves as comfortable as possible. Every crack where we could find the smoke coming out, was stuffed with cotton, or plastered over with pipe clay, of which the captain found a small lot on board, attached to the galley erected for the steerage passengers. The icehouse on deck contained fresh meat, such as beef, chickens, ducks, &c., and the

cooks were employed in cooking. We sent some warm coffee and fresh milk, with some boiled fowls, to our friends in the long boat, and made every exertion to lighten their misfortunes. But still no ship came in sight, and evening at last found us in the same perilous situation that we were in the night before. During all this day, the deck was quite warm, on the right hand side forward of the mainmast, indicating, as we supposed, that the fire was under that part of the vessel; the thick glass deadlights set into the deck at intervals of about two feet from stern to stem, were also quite hot.

About ten o'clock, on Sunday night, most of the unfortunate people on board the ship sunk to sleep on the deck from mere exhaustion, leaving only three people awake to watch for help, or to warn us of what we most dreaded, a bursting out of the flames. No language can tell of the sufferings of that night, which was more dreadful than the last. We were like people confined on the top of a burning mine, with no power to escape—death almost certain to be our portion within a few short hours, and our minds tortured with suspense.

During the night, Capt. Anthony laid down and caught a short sleep. The weather was tolerably fair, but silence reigned throughout, except so far as it was broken by the occasional rumbling and dashing of the sea. Just before two o'clock I lay down beside him to meet my fate, leaving only one man walking the deck, and in doing so, I disturbed him. He waked, and turning over, he took my hand and remarked, "I feel that we shall be saved—I have had a pleasant dream." This circumstance, slight as it was, had its effect, and did impart some little consolation to both of us.—So true it is that drowning men will catch at straws.

About this time the weather was changing and the sea had risen, and the people in the long-boat became alarmed. Mr. Wainwright hailed the ship, to know if it would not be best to take the boat in. Capt. Anthony answered that they had better wait patiently until daylight, and then walked forward to examine into the state of the ship. We now found that the fire had evidently increased, the deck and hatches were still quite warm, and the pitch was beginning to boil or melt in the seams between the planks. A short conference convinced us that but little time could elapse before the fire would burn through the deck, and then there would be no further hope. What we said and

what we felt between that time and daylight, is not to be told here—it is sufficient that we thought we knew the worst; the two small boats could not hold more than fifteen persons, and there were nearly thirty on board the ship; under the best of circumstances some of us must be lost, and it is needless to say that Capt. Anthony determined that he should stick to his vessel and run the risk rather than crowd the boats with too many people, or exclude any one else.

“At daylight Mr. Wainwright came on board in one of the small boats, and we explained our situation to him. There was but a chance for any of us. If he and his party remained in the boat, they *might* be saved, but if they were taken on board the ship, and the fire should break out, it would then be impossible to put the people into the boats again, and launch them over the side, and death by fire or drowning would be the certain fate of all. The case was too strong, and the horrid conviction was too apparent to be disputed, and, as was his duty, he prepared to return to his family and meet his fate. It is not for me to say what were then our feelings. Three of us, in the fulness of our strength and the ripeness of years, were then parting, as we all supposed, for ever; and nearly every one else was asleep. Words were useless, and we could not utter what we wanted to express. We commended our families to each other, in case either should be saved; and with a silent shake of the hand he returned to the boat, to make such preparations as prudence suggested, to protect his almost helpless companions in case we should find it necessary to cut his boat adrift.

“From this time the sea became more boisterous, and, at last, after some hours of anxious watching, we sent for Mr. Wainwright to come on board again, and he was told there were fears that his boat would swamp. Capt. Anthony was afraid to make sail on the ship, as the working of the masts might create a current of air below, which would either increase the fire, or, operating on the gas in the hold, blow off the hatches, and thus seal our fate at once. After some consideration, it was concluded to run the risk and take in the boats, and put the ship before the wind, in the hope of falling in with some other vessel, before we were entirely consumed.—and no time was lost in putting the plan into execution.

“When the poor sufferers in the boat came on board, their situation was found

to be much worse than ours had been. We had at least had the power of locomotion, and could shift our position at will; but they, particularly the females, had suffered, for two long nights and a day, the tortures of a cramped-up situation, unable to sit, except in a certain position, with their feet continually in the water, and their bodies every few minutes covered with the dashing spray of the sea. Mrs. Wainwright had held one of her children in her arms the whole time, and not being by any means a robust woman, it is astonishing that she held out so long. Nothing but a mother's love, and a firm trust in an over-ruling Providence preserved her in those hours of trial. Mrs. Arfwedson was almost exhausted, and her infant having suffered for want of the natural nourishment its mother could not afford, seemed almost ready to die. Some of the passengers in the boat were seasick the whole time, and, taken altogether, their situation had been more trying than ours.

“Once more together, and stowed in the most comfortable way possible on the quarter deck, some little cheerfulness was shown, although all felt that our situation was not in the least alleviated, and many feared that we had but joined together to struggle and to die. Sail was made on the ship, and we stood off to the north-east, and at noon we found by observation that we were in latitude 48.08 and longitude 56, having drifted to the south-east with the sea. We were now in the track of vessels bound to and from Europe and the United States, and the hope that we might yet be saved, inspired some confidence. The men were now put to work at the pumps, and the ship was found to have leaked a great deal, a part of which was undoubtedly owing to the pitch, where she had been caulked, having boiled out of the seams; the water which was pumped up was quite hot at first, and as long as the men pumped, it continued to be warmer than the temperature of the sea, or of common bilge-water.

“About 2, P. M. this day, (Monday) a sail was discovered from the mast-head, and soon after it was seen from the deck. The joy which this discovery gave can be imagined, but cannot be described; it seemed as if some would almost, if not quite, go crazy. The stranger saw our signals of distress, and being to leeward, hove to for us to come up. It proved to be a Boston built ship, called the Clifton, Captain J. B. Ingersoll,

bound from Liverpool to New York, with two hundred and fifty steerage passengers, mostly Irish. To Capt. Anthony's statement that his ship was on fire in the hold, and that we wanted to be taken off, the prompt answer was, "Come all on board of me, and bring all the provisions you can."

"Before our own boat could be got out and manned, the boat of the Clifton, with the chief mate and four oarsmen were alongside of us, and the process of transferring all hands from ship to ship commenced. The sea was very high, and the gale was increasing, which made our task a long and dangerous one; from three until nine o'clock the two boats were passing and repassing, with people and such articles as could be saved from the deck.

"The gale was now blowing from the north-west, and both captains remarked that they did not recollect ever to have seen a worse sea for many years. We were all safely on board by nine o'clock, and Capt. Ingersoll not thinking it safe to risk his own ship any longer by laying to, in the vain hope of saving property, made sail on his ship, and we left the unfortunate Poland to burn up and sink, a fate which she undoubtedly met within two or three hours.

"At the time the last boat's load left the Poland, the decks had become too hot to stand upon, and her sides were so warm, that as she rolled into the sea, the water would run off as from hot iron, and she would instantly become dry, and too hot to bear the hand upon. An effort was made to get out some articles from the house over the cabin stairs, but on opening the doors, the smoke, heat, and deleterious gas drove the people away instantly, and a second attempt proved alike fruitless. A like attempt near the main hatch met with the like success, and the ship was abandoned with tears and regret, for the sailors imbibe an affection for the craft in which they have sailed."

The persons thus providentially rescued were received with the utmost kindness and attention, in their destitute condition, by the captain and crew of the Clifton, and on the 26th were safely landed in New York, most of them with the loss of every thing which they had on board, except the clothing which they wore at the time of the disaster.

June 3. Arrived in Boston, from Liverpool, by way of Halifax, steam ship Unicorn, Capt. Douglas, after a passage of 18 days, having stopped 12 hours at

Halifax, and bringing London news of 15 days later date than had been before received. The Unicorn is the first of the steam ships provided by Mr. Cunard, for conveyance of the Mail, under a contract with the British Government, twice every month, between Liverpool, Halifax, Boston and Quebec. The principal line, between Liverpool, Halifax and Boston, is to be formed by steamers of a larger class. The Unicorn is to be employed between Pictou and Quebec, for the purpose of extending the line from Nova Scotia to the last named port. She is a fine ship, of 700 tons burthen, of good model, strongly built, and has excellent machinery. Her cabin is richly finished, and she is in all respects a very safe and comfortable vessel. Her arrival at Halifax, and at Boston, was hailed with great satisfaction by the inhabitants of those places, and her arrival was celebrated in the latter, by a public festival, given by the city authorities in Faneuil Hall, to which Mr. Cunard, the son of the enterprising contractor, and Capt. Douglas, the commander of the Unicorn, together with the officers of the city and State, and other distinguished personages were invited.

June 9th. The following information of an important regulation in relation to the American trade in the ports of the British East India possessions has been received from the American Consul, Mr. J. Balister at Singapore, under date of

SINGAPORE, 1st. Feb. 1840.

By a Government regulation, dated in Calcutta, 2d December, 1839, the former regulation limiting Foreign ships to import into the British Ports of India, only articles of the growth or produce of their respective countries, has been rescinded and "foreign ships belonging to any state or countries in Europe or America, so long as such states or countries remain in amity with H. M. may freely enter the British sea ports and harbors in the E. I. whether they come directly from their own country or any other place, and shall be there hospitably received and shall have liberty to trade there in imports and exports, conformably to the regulations established or to be established in such sea ports: Provided, that it shall not be lawful for said ships to receive goods on board at one British port of India, to be conveyed to another British port of India on freight or otherwise; but nevertheless, the original inward cargoes of such ships may be discharged at different British ports for their foreign destination."



[illegible]

